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Established 1848.

ST. LOUIS, THURSDAY, FEBRUARY 1, 1883.

No. 5, Vol. XXXVI.

Sorgo Department.

Cultivators of Northern sugar cane will do well to see Folger, Wilde & Co's advertisement in this issue and then at once send for their new catalogue.

Superphosphate in Raising Cane.

Among the interesting results of experiments with Northern cane, discussed by Prof. Weber at the meeting of the Amber Cane Association at Minneapolis, there was one which especially impressed itself upon our mind on account of its direct bearing upon the agricultural welfare of our country. By the application of superphosphate to a plot of Amber cane, not only was the time required for maturing the cane shortened by sixteen days, but the amount of cane sugar was increased over one per cent. The young plants grew vigorously and rapidly in the start, and kept ahead of the weeds. It is evident that the increase in sugar will amply repay the expense of fertilizing, to say nothing of the advantage of a longer working season, and in the cultivation of the crop.

We need not close our eyes against the fact that in the prevailing system of American agriculture, our fertile fields are becoming impoverished. The experiment alluded to above shows conclusively that even the rich prairie soil of our boasted sister State, Illinois, responds gratefully to the application of fertilizers. When the use of fertilizers produces returns which will make it an object to the farmer to procure these fertilizers, even with some trouble and cost, then we may expect to see some attention given to this important matter—and, perhaps, not till then. Hence we are constrained to believe that the cultivation of Northern cane may be a means of recovering our exhausted fields, and of preventing the deterioration of others.

The Wisconsin Cane Growers' Meeting.

The Editor of the RURAL WORLD has accepted an invitation to address the Wisconsin Cane Growers' Association, at Madison, at its coming meeting, February 13, 14 and 15. It is thought this will be the largest meeting of Cane Growers held this season. The Cane Growers of Wisconsin are a wide-awake set of men. They have a State that produces a first rate quality of cane, and they will not rest satisfied till they know how to make the best quality of syrup and sugar. They know that by meeting together and comparing notes, and relating experiences, and hearing how the best syrup and sugar are made, they are going to learn how to make it, and that is why they will attend the meeting at Madison in large numbers. There will be a large number of Cane Growers from other States present, also. We got a promise from the Hon. Seth H. Kenney, of Minnesota, that he would try to attend the meeting, and Mr. C. F. Miller, President of the Minnesota Cane Growers' meeting will be present if possible.

These gentlemen are the fathers of the new industry in Minnesota, and their names are familiar to the Cane Growers of the United States. We urged Prof. H. A. Weber of the Champaign, Ill., Sugar Works to attend, and have a partial promise from him that he will go. And we hope our good friend G. W. Gere, Esq., the financier of the Champaign Sugar Works will go to tell, in his inimitable manner, how the finances panned out in that enterprise. Then we think we can promise that Mr. O. B. Jennings, of Fort Dodge, Iowa, will be there. He has been making some investigations and inventions, relating to this industry that in our opinion are going to revolutionize the methods of making syrup and sugar, not only North and South, but throughout the civilized world. We can assure those who attend, that they will gather much valuable information, and will have no cause to regret the little time and expense they incur to do so.

Sugar Factory at Belleville, Ill.

[From St. Louis Republican Jan., 27th.]

As announced, a meeting, both of business men and farmers, interested in the establishing of a sugar manufactory in Belleville and the growing of sugar-cane in that locality, was yesterday afternoon held in the court-house. The object of the meeting was, principally, to listen to the views of those familiar with this industry and also of those who have been instrumental in getting up the cane-growing and sugar manufacturing boom. The meeting was attended by about two hundred persons, most of whom were farmers who are contemplating the growing of cane, and who were anxious to get all the light possible upon the subject. There were also enough business men and capitalists present who will take

stock in the sugar factory to insure its successful establishment if the farmers will grow the cane, and it is said that the sugar company, which has already been organized and licensed, has been assured that there will be a sufficient number of cane-growers to warrant the erection of the sugar factory. The meeting yesterday afternoon was called to order and Don Turner was chosen chairman and August Chenot secretary. After the object was stated Col. N. J. Colman of St. Louis addressed the meeting. This gentleman, having given considerable study and attention to the subject of cane-growing in this latitude, was thoroughly competent to speak about it. He held that farmers could put their land to no more profitable use than that of growing sugar cane. The fact was indisputable, in his estimation, that the farmers in this region would have to give up the growing of wheat, as they could not compete with the wheat-growing regions of the North and Northwest, which were constantly being rapidly developed. Those regions will be able in time to supply all home demands at a figure that will make it unprofitable to raise wheat here. It was the foreign demand that at present made it possible for Illinois farmers to grow wheat at all. The wheat lands here are being run out by the drain that has been and is being made upon them and some other crop has to be substituted. He had no doubt whatever that the best substitute was sugar cane. Its raising would not only be much more profitable to the farmers, but it will enrich the land, as it was well known that sugar cane, like clover, was a rich land fertilizer, so that the farmers would be gainers in two respects: The increased direct profits from the cane, and the fertilization of their exhausted lands. He then described the manner of growing cane, and gave his own observation and experience concerning the industry.

His remarks were closely listened to and were well received.

The other speaker was H. A. Weber of Champaign, Ill., the State chemist of Illinois. His discourse was of both a scientific and practical nature, and proved interesting and instructive. In his region, at Champaign, there was a sugar factory, and last year there were 200 acres of cane grown and this year there would be a thousand acres. There the farmer netted a profit of \$20 to \$30 per acre growing the cane, while the sugar factory made a profit of \$55 per acre in making sugar and glucose from these 200 acres of cane. What could be a better investment? None, in the state chemist's opinion.

After the speaking a number of the meeting came forward and took stock in the Belleville Sugar Factory company. Much interest is being manifested in cane-growing and sugar making, and it may yet become a great industry in St. Clair county. Before adjourning a vote of thanks was tendered to the two distinguished speakers for highly entertaining and instructive addresses.

Mississippi Valley Cane Growers' Meeting.

[CONTINUED FROM LAST WEEK.]

The President—The next topic is the Rio Grande Sugar Works. There is no representative here, but I have a letter from Hon. James Bishop, who was with us last year, and will read it. It is as follows:

OFFICE OF BUREAU OF STATISTICS
OF LABOR AND INDUSTRIES,
TREASURY, N. J., Dec. 6, 1882.

COL. NORMAN J. COLMAN:

Dear Sir: The notice for the annual meeting of the Mississippi Valley Cane Growers' Association was duly received, and subsequently your kind letter of the 25th ultimo, urging me to present, and to secure the attendance of a representative from the Rio Grande Sugar Company.

I very much regret that the pressure upon me just now in the preparation of the Annual Report of the Bureau, to be presented to the Legislature of our state, which meets early in January, is so great that I will not be able to attend the meeting; but will use my best powers of persuasion to secure representation from the Sugar Company.

The guilty conduct of Mr. Hilgert a few months since, which caused him to leave the country, threw the management of the Rio Grande Sugar Company into new hands. These new managers, not having had experience in sugar making, were not prepared for the difficulties which they encountered upon the opening of their works in September last; for while they find an abundance of steam power, and a grinding mill capable of crushing 200 tons of cane a day, the machinery for making sugar was only capable of working up the product of 100 tons of cane. Of course, the mill could not be stopped during the working season for enlargement, and the result was, the loss of a large amount of sugar. There was but one vacuum pan of medium size, four small centrifugal mills, and about twenty wagons, whereas, there should have been two large vacuum pans, six centrifugal mills, and, at least, one hundred and fifty wagons. The managers of the Company are now preparing to enlarge the mill and put in machinery which will be capable of working up the product of 15,000 tons of cane. Notwithstanding all these drawbacks, the result of the season's work is far from discouraging.

The business was conducted with thorough system. As the cane was carted from the field, each load was weighed as it passed through the factory gate, and at regular intervals, four times each day, samples were taken into the office and carefully tested. These tests varied considerably, but the average for the whole season was 11. Baume, which was slightly higher than the average of last year.

The purity of the cane for the whole season was 84.16. Cane planting was delayed in the spring by bad weather, which kept the cane from maturing later than usual. After the mill opened in September several storms occurred, greatly retarding work—for our cane will not yield its proper percentage of sugar for some days after a continuous rain—and in consequence, for the first two weeks of the season, more sirup than sugar was produced, viz: 112 barrels of sugar and 1st barrels sirup. This condition of things, however, soon changed, and on the fourth week the yield was 130 barrels of sugar and 110 barrels of sirup.

As it was feared that the farmers in the vicinity of the mill would not furnish a sufficient supply of cane to keep the works running, the Rio Grande Sugar Company planted several hundred acres of their own land in cane, which led to some very interesting experiments. The details of these experiments I cannot enter into in the brief space of this letter, but will mention some of the results.

One plot of eight acres (actual survey) yielded 136 tons of cane, an average of seventeen tons to the acre.

Another plot of one acre yielded twenty-one tons of cane, under different treatment, yielded twenty-two tons. This cane was weighed before being stripped, as the cane this year was all crushed unstripped, being run through the mill with the blades on, a deduction of 10 per cent. for leaves being made by the State in the payment of bounty. I have neither time, nor would it be proper to enter into further details, as our several State Reports will give full particulars in regard to our experiments in sugar culture.

As it may interest the "Association" to know what has been paid in New Jersey for bounties upon both cane and sugar for the present year, up to the 1st inst., I will state the amount:

For 5,238 tons of stripped cane @ \$1.10..... \$5,761.80
For 319,944 lbs. of manufactured sugar..... 3,199.44
@ 1c..... 3,199.44

\$8,961.24
*1,011 barrels of sirup were made upon which there is no bounty.

Very Respectfully,
JAMES BISHOP.

A member—It would be interesting to know what the comparative product of sugar is in the South.

The President—I saw a statement a short time since, saying they were getting a very remarkable product of sugar the present year—in some instances as high as 125 pounds of sugar per ton of cane, and probably 20 tons of cane per acre.

Mr. Belcher—I think the highest they have ever got is from 130 to 135 pounds of sugar to the ton of cane.

The Secretary—I will read a newspaper cutting in reference to the Southern cane product this season. It is as follows:

WONDERFUL CANE TONNAGE.

[From The New Iberia Sugar-Bowl.]
Up to the beginning of this week, while the sugar yield per acre was highly satisfactory, yet the yield per ton of cane was unusually low—averaging about 100 pounds of sugar to the ton, while the yield generally reached from 110 to 120 pounds, and in rare cases as high as 130 pounds of sugar to the ton of cane.

The season was highly propitious for the growing of cane, and the stand being perfect and the suckering unusually heavy, the long, continued warm weather permitted the plant to attain a size seldom seen in Louisiana. The dry weather also caused a greater maturity of top joints than usual.

All this conspired to give the great tonnage per acre which is a marvel to many. We learn from Mr. R. H. Yale, of New Orleans, that on his coast plantation he is now obtaining forty tons of cane to the acre, and he heard that Mr. Amodee Bringer claimed he was getting forty-nine tons to the acre from some of his land. As more than twenty tons to the acre is seldom obtained, the reader will see what a wonderful cane year this has been. Now that cool weather has set in, it is likely to become a sugar year as well, and we expect to hear of great yields of sugar per ton as well as heavy tonnage to the acre.

The President—I would like the members to state briefly how many tons, by actual weight, have been obtained per acre, and the number of gallons of sirup to the ton, and if any made sugar, the amount of that, also.

Mr. Allen (of Kansas)—The average yield from twenty-five acres of my own product was nine tons per acre. One-quarter of mine was of the Amber variety, one-quarter Early Orange, and one-half another variety of Orange. There were some two or three acres of very poor land, and the average of the whole year's operation, including all classes of cane, was thirteen gallons to the ton. I have been told that Mr. Amodee Bringer claimed he was getting forty-nine tons to the acre from some of his land. As more than twenty tons to the acre is seldom obtained, the reader will see what a wonderful cane year this has been. Now that cool weather has set in, it is likely to become a sugar year as well, and we expect to hear of great yields of sugar per ton as well as heavy tonnage to the acre.

Mr. Powell (of Wisconsin)—From my sixty acres I obtained eight and eight-tenths tons per acre. Taking cane from a number of different farms the yield was fourteen and three-quarter gallons per ton. I had cane brought to my mill that went as high as sixteen tons to the acre, but the average was eight and eight-tenths.

Mr. Stout (of Kansas)—On 125 acres of cane, the average was a little over ten tons, that is, counting 2,200 pounds to the ton, and we averaged twelve and three-quarter gallons of sirup to a ton of cane. We allowed 200 pounds for blades and seed. That is the way I bought, and the way I weighed my own. Where allowed to cure for a week we counted 2,000 pounds to the ton.

The President—Did you allow some to cure for a week, and with what result?

Mr. Stout—We did; and it only took half as much boiling as when worked green. There was scarcely any scum on it, it was pretty clear. We laid it down in winrows in the field, and afterwards made a rick 300 or 400 yards long—probably 100 tons in it—put up on

the 10th or 15th of October, for fear of frost, and we worked it up the 1st of November. When we commenced working our cane the 1st of November it only tested 7 Baume; in a week or so it tested 7. Our Amber never got above 7.

The President—About what is the relative increased weight of the Orange over the Amber cane per acre?

Mr. Stout—Well, a good deal of our Amber cane only ran about seven tons and our Orange brought up the average to a little over ten. It was about half Amber and half Orange. The best Amber ran up to eight or nine, and a good deal of the Orange would run to twelve and thirteen.

The President—The Orange would yield 33 1/2 per cent. more per acre?

Mr. Stout—Yes, the Orange out-yielded the Amber considerably. I think, in our estimate, the Orange went fully to 150 gallons, while the Amber yielded only about 100 gallons to the acre. We made sirup only.

Mr. Powell (of Wisconsin)—My average yield per acre was not great, owing to the bad season. Including nineteen acres which I considered almost a failure, I averaged a little less than eighty-two gallons per acre, but leaving it out the average was 126 gallons per acre, or a little over fourteen and one-half gallons of heavy sirup per ton. My only difficulty was that it would granulate too much.

I would like to know how we can manage to dehydrate our sirup properly with an alkali, make it up soon after it is cut and make it into heavy sirup and not have sugar? I have more wet sugar on my hands now than I want to carry over.

A member—I had the same difficulty last year. I had 2,200 gallons in a tank at one time and didn't know how I was going to get it out. It seemed to all go to sugar.

A member—(of Michigan)—The work done in our agricultural college has been in a small way for experimental purposes, and we didn't weigh the cane, so I can only give the number of gallons to the acre and nothing more. We made there 150 gallons to the acre. It is very choice and carefully made.

Mr. Root (of Michigan)—We worked up on a small scale, this year, with steam, somewhat, but didn't weigh the cane. It yielded per acre 200 gallons very nice heavy sirup.

Prof. Seabolt—What variety of cane?

Mr. Root—The Amber cane.

Mr. Furness (of Indiana)—The question has been asked how to remedy granulation when you don't want to make sugar. I have two coolers, and pour it in the coolers alternately. I work mine off in batches of about a tubful in a batch; throw in these coolers about seven feet long, stir and cool as rapidly as possible. If you want it to granulate keep it warm for twenty-four hours.

A member—That is just the way I did to make it granulate.

The President—I would suggest that if the Professors from Champaign are right, the way not to have sugar is to cut it and let it stand three or four weeks. They say it is converted very rapidly into grape sugar after being cut. I will ask Prof. Weber if he can tell these people how to keep their sirup from granulating?

Prof. Weber—The remedy you suggest is the best one I know of; to cut the cane and let it stand. It will make a lighter sirup, ordinarily, than when worked up immediately, and will not crystallize, but the simplest way is not to boil the sirup down to so low a density.

A member—The artificial glucose has a sweetening power of only about two-fifths that of cane sirup. I want to ask if the cane is allowed to lie as has been stated, and the cane sugar inverts or becomes converted into glucose, whether that natural product of glucose has a sweetening power above the artificial product produced by treating starch with acid.

Prof. Weber—There is a great difference between glucose chemically considered and the artificial glucose that is made at present. Glucose chemically considered is grape sugar, and there are several varieties. The sweetening power of this grape sugar is about one-half, or as some say, two-thirds that of cane sugar. Now in this natural grape sugar that is formed by inverting the cane sugar the sweetening power is not lessened nearly so much as it would be if the same amount of artificial glucose, were added, because artificial glucose consists, to a very great degree, of dextrose, a soluble starch. It is impossible for the glucose manufacturers to convert all of their starch into grape sugar and then make a sirup that will not stand but will grow thick. To prevent this they leave a great proportion of dextrose unconverted, and this dextrose is nearly tasteless.

Mr. Roll (of Ohio)—The yield per acre of one year's work was less than that of many gentlemen here. We worked 74 acres of cane; the average degree of Amber juice was 8 degrees; of the Librarian, 8 1/2; the Kansas Orange, 9; the Early Orange, 9. We had two acres of our first planting of Early Orange that stood very well, and that made 75 gallons averaging about 187 gallons per acre. That was as good as I have ever had; it was a very nice piece of ground (of Ohio)—I have had twenty-one years' experience, and a few seasons have tried to make sugar with very good success. In the years 1867 and 1868, I believe it was, we had extremely dry seasons. I was very easy to get the sirup to granulate. I prepared for myself a little room expecting to furnish it with heat, but never got it quite completed. I put my sirup in there and most of it went to sugar. I had as high as 7 pounds of very nice sugar to the gallon. I used fire-pans and the mode of treatment was this: I bought what claimed to be a sugar-making process, the only thing claimed in it, I believe being that a little butter or lard, or something of that kind, should be dropped into the pans about the time of finishing and it should then be stirred lively. I have seen the same thing

at my friend McQuiston's in Ohio. He was here with me last year. He showed me when I visited him 25 samples, one taken from each batch as it was finished, and there was but one among them but was granulated. He told me he used a pound or two of butter a week and that seemed to be the effect of it. In hot, dry seasons, too, it is much easier to granulate it than in a wet season.

The President—I would like to ask Prof. Weber, who understands the chemistry of sugar making well, what effect the putting in of a little butter or lard would have in producing granulation?

Prof. Weber—The addition of a fatty substance of that kind to a boiling solution prevents the rising of the foam, and is an aid in manipulating the heat, but I don't think it has the least effect in making it into sugar. In fact I think it would be better if it were not there. In my former remarks I did not intend to say it would be impossible to granulate a sirup if the cane had been shocked for some time, but it could be done.

Mr. Hendershott—I would ask if reducing the cane juice with high heat would not prevent crystallization.

A member from Ohio—I always put in a little butter or lard to keep it from scorching, and boil my sirup down to about 37; I have very little trouble about its crystallizing when I don't want it to. I have capacity to make only about ten gallons an hour. I have had some crystallize, but never thought that the grease caused it. I never thought of the rapid boiling preventing it from crystallizing either; but it may do so. I boil rapidly, put it in the cooler and then stir rapidly.

The association then took a recess until 7:45 o'clock this evening.

[Continued next week.]

Agricultural.

Farmers' Institute Meeting by the State Board of Agriculture at Nevada, January 23, 1883.

EDITOR RURAL WORLD:—To-day three sessions, for the discussion of farm topics, have been held by the State Board of Agriculture. The persons present, in addition to the acting secretary, Prof. J. W. Sanborn, of the State Agricultural College, were Prof. S. M. Tracy, of the Agricultural College, and M. Fairchild Dowd, of the Board, and editor of the Farm and Stock Journal. Sickiness, it was explained, had prevented the attendance of other speakers expected, and press of business—the editor of the RURAL WORLD, Gov. Colman, an active member and supporter of these meetings, being absent from the State. It may be said at once that all the addresses given were upon practical topics, and covered ground with which each speaker was familiar by practice or much experience. The time was fully occupied and the speeches received the close attention of the audience throughout.

At the close of the last session Secretary Sanborn said that the interest manifested and the attending members gave assurance of a demand for such meetings in the future, this being the inauguration of the work. The Nevada meeting is the second one of the series of three for this winter, and the starting point of a more general movement for next winter, as we are informed.

MORNING SESSION.

The morning session was opened by Secretary Sanborn in explanation of the purposes of the Board. In pursuance of the object, the speaker reviewed the work in the field of agricultural investigation for the past generation. One hundred and thirty or more experiment stations, employing several hundred expert workers, had been inaugurated in Europe. These stations devoted their energies alone to searching for farm facts. In this country six such stations had already been founded, one having \$20,000 a year to devote to farm investigations. Nearly all the agricultural colleges were now giving much attention to farm experiments. Many private persons in Europe and America were devoting time and money to the study of farm problems—notably Sir J. B. Laws, who uses \$15,000 yearly now, and who has been engaged for over forty years in farm studies. No other industry, profession or science is being so rapidly developed, and is accumulating facts so fast, as farming. The Board would endeavor to collect and disseminate new and important truths.

At the conclusion of the above review, the secretary gave a talk on "Pedigree Seed, or Seed Breeding and Tillage." The laws of seed breeding were some what analogous to those of animal breeding. Skillful selection and crossing were attended with as good results as in the animal kingdom. The value of our farm crops is greater than that of our domestic animals, and their cost determine the cost of animal products. Seed breeding is, then, more important than animal breeding. The results of skillful selection and crossing of seed were then recounted, examples of success being given. The speaker favored frequent and shallow tillage, in times of drouth, for corn, giving the results of experiments in Europe and this country, showing that it prevented evaporation of moisture from the ground, but did not cause the ab-

sorption of water from the air, as commonly supposed.

AFTERNOON SESSION.

Mr. Dowd, Chairman.
Prof. S. M. Tracy gave a talk on the "Doubletree." Without drawings to illustrate, it will be difficult to convey a plain explanation of his points. Prof. Tracy clearly showed that the construction of most doubletrees is very faulty. Whenever the point of attachment of the horses and of the load to the doubletree is a pivotless iron, or the irons move with the doubletree, keeping at right angles to it, then the amount of the load each horse draws varies if one horse draws ahead of the other. As to whether it is the forward or the slower or lazier horse that gets the most load, depends upon the construction of the doubletree. If the irons are put onto the doubletree loose, or to swivel, and are in a right line, then in the attachments there is no difference in the draft, whether one horse leads the other or no. In case it is not so constructed, whether the front or rear horse draws most depends upon whether the center attachment is in front or rear of end irons for attachment, as determined by the drawing of a straight line from the end points of draft.

M. Fairchild Dowd followed in a talk upon "Corn Culture."
Mr. Dowd favors the selection of pure seed corn for use. Thought seed corn was poorly selected. He had searched the wagons of corn on the street, and visited three stores, but could find no un-crossed corn. He showed the best samples he could find. They were quite mixed. The speaker would plant late and deep. He gave much experience confirming his views. His argument was that corn was partial to a warm soil, and would sprout better after it was well warmed. The audience very generally disagreed with Mr. Dowd in reference to time of planting. He advocated strongly thorough tillage of corn to prevent the effects of drouth. His experience in Kansas had shown him that thorough and frequent tillage will very materially mitigate the effects of drouth.

Many questions were asked of each of the three speakers at the conclusion of their talks, but our columns are too full to give an outline here.

Secretary Sanborn followed with an extended talk on the "Laws of Animal Growth and Economical Food Combination." From years of accurate experimental inquiry, the speaker gave facts covering the question of the animal to feed, shelter, early maturity and food rations for success. We cannot repeat the statistics, but they illustrated the superiority of a good animal over an ordinary one; of the economy of shelter; of the food used, and the superior results of food given to sheltered beasts; the very great advantage of early matured beasts when fed for meat products; and the great economy of food combinations, and the necessity of adapting the mixtures to the purpose for which an animal is fed. It was maintained that corn, fodder and straw have high feeding value when fed rightly and in conjunction with clover hay or cotton seed, or cotton seed meal. Samples of corn-fodder, thoroughly stripped up into fine fragments, were shown, all of which would be eaten by an animal, and would have a value of three-fourths that of good hay, if rightly handled.

EVENING SESSION.

Two addresses were given, one each by Secretary Sanborn and Prof. Tracy. Both were too full for a valuable synopsis to be given.

Secretary Sanborn strongly advocated the production of more and better butter. He believed this to be the most neglected department of agriculture in Missouri. We, as a State, do not produce nearly all we consume, and that produced is with primitive methods and of low grade. This he disliked to say, yet he was confident, by inspection of the butter in our stores, at hotel tables, and by consultations with merchants, it was true. He had seen the average butter of several States at the stores, hotels and homes of the people, and we are behind; yet we have the herbage and opportunities to become a famous butter State. The advantages of dairy farming were then stated, and the method of producing fine butter given in detail, through all its stages, from the care and food through to making and marketing.

Prof. Tracy gave a full talk on the farm experiments conducted at the Agricultural College for years past, by which it seems that a multitude of varieties of wheat, corn, potatoes, &c., have been tested. Fultz and Ostrey wheat have proved the two most promising varieties tested. The Evans corn had given the greatest satisfaction in the corn line. Many varieties of potatoes had been tested, only to find that no variety is satisfactory in its keeping qualities for this climate. Some seedlings of home-raising were now being started. It was his belief that a potato, to be adapted to this State, must be originated here from the starting point. Apples brought from the North, of the most promising kinds as regards keeping qualities, lost those qualities here. Apple trees from the South proved our best ones.

After a few complimentary thanks to the audience for the attention and courtesies of the day, and hopeful expressions regarding the future of farming and the work of the Board in this State, the meeting adjourned, with the applause of the audience.

REPORTER.

Nevada, Mo., January 23.

THIRTY-SIXTH YEAR. COLMAN'S RURAL WORLD.

BY NORMAN J. COLMAN.

PUBLISHED WEEKLY AT
ONE DOLLAR PER YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements. Address NORMAN J. COLMAN, Publisher, 600 Olive Street, St. Louis, Mo.

(Advertisers will find the RURAL WORLD one of the best advertising mediums of its class in the country. This is the uniform testimony of all who have given it a trial. Many of our largest advertising patrons have used it for more than a quarter of a century, which is the highest possible recommendation of its value as an advertising medium.)

Readers of the RURAL WORLD, writing to or calling upon, any one advertising in our columns, will do us a favor if they will say they saw the advertisement in this paper.

Premiums for Clubs.

In reply to inquiries whether we will offer premiums for large clubs we will say that we have concluded to open a premium list in which our friends can make such offers as they like in poultry, hogs, pigs, implements, machines, nursery stock, and such articles as we have been in the habit offering in years past. Those wishing to aid in extending the circulation of the RURAL WORLD should send us letters stating what they will give. We will keep list standing, giving name and post-office of donor and the article offered. Our subscribers can now go to work getting up clubs with the assurance that every large club maker will get a fine premium.

PREMIUMS FOR CLUBS.

Chasman D. Colman, Lakeside stock farm, St. Louis, Mo., offers one pure Jersey Bull calf, from deep milking strains.
L. W. Ashby, Calhoun, Henry Co. Mo., offers a fine Berkshire pig.
Ephraim Link, Greenville, Tenn., offers one half bushel of Link's Hybrid cane seed.
Thos D. Fox, Freeburg, St. Clair Co. Ill., offers as one premium one pair pure bred white Leghorn chickens and one setting of Brown Leghorn eggs.
And for another premium the same party offers one pair pure bred brown Leghorn chicks and one setting of white Leghorn eggs—all to be packed and shipped as directed.
Mr. H. V. Pugsley, Plattsburg, Mo., offers a first class merino ram as a first premium.

RENEW! RENEW!

If you have forgotten the important matter of renewing your subscription attend to it at once. All names are stricken from our mailing list as they expire, and sometimes this causes the loss of the first numbers of the year when it may be found impossible to supply them.

IT ALWAYS STOPS.

The RURAL WORLD always stops when the time paid for expires. Don't subscribe for a paper that you can't get rid of when the time paid for is up. Anyone can afford to pay one dollar a year, less than two cents a week for such a paper as this. Compare it with any of the two dollar papers, and you will hold fast to the RURAL. It is a \$2.00 paper for only \$1.00.

The next annual meeting of the American Association of Nurserymen, Florists and Seedsmen, will be held in St. Louis, commencing on Wednesday the 20th of June, and continuing in session three days.

NORMAN J. COLMAN will deliver a lecture before the Agricultural Institute of the Illinois State University at Champaign on Friday, February 2d, on the Breeding, Rearing and Management of the Horse.

The coldest weather that has been known for many a year north and west of us occurred about January 18th, and continued for a week or more—thermometer going way down below zero. At Fargo it was 38, Grand Forks 50, Bismarck 58, Winnipeg 60 degrees below on the 20th.

The effort to corner clover seed seems to have been successful, and it has rapidly advanced in price, in consequence. This is well enough for those who have the seed to sell, but it is hard upon those who have it to buy. More of our Western farmers should raise clover seed. It is a paying crop. The demand for the seed is yearly increasing. Scarcely any other crop does so much to enrich the soil. The farm that does not have clover raised upon it is going backward. It is an indispensable crop on every farm.

The North American Review for February has been laid on our table. This is one of the oldest and ablest literary magazines of the age. It is edited by Allen Thorndike Rice. The February number contains able articles on the "Revision of Creeds," the "Experiment of Universal Suffrage," by Prof. Winchell; the "Decay of Protestantism" by Bishop Quaid; the "Political Situation," by Geo. S. Boutwell, and the Hon. Horatio Seymour of New York, and other able productions. Gov. Seymour's article is worth of itself many times the publisher's price. Mr. Boutwell makes many candid admissions, and may be regarded as an orthodox from the other side.

A REVIEW of the banking business in St. Louis during the past ten years discloses some queer and interesting facts. While the business of the city has grown steadily, while wealth in every shape has undoubtedly increased and the channels

of trade enlarged not only at home but with foreign lands, no new bank has been opened here in ten years. On the contrary we find them closing up very rapidly. It will surprise many to learn that in 1873 St. Louis had 60 banks and in 1883 only 24. This is an alarming shrinkage, yet a profitable and sensible move on the part of the bankers—insuring as it does more safety to the public and themselves, too. An encouraging feature in this connection is the fact that the 24 banks receive more deposits than did the 60 when they were running. The banks of St. Louis are now solid enough to survive very heavy reverses.

The new industries continue to increase. A man in this city who feels it incumbent upon himself to establish a new religion has rented a room in a central location, and proposes to fast 50 days touching nothing more substantial than water during that time. He invites public attention to this fact and charges a modest sum to look in upon him. As the public did not take enough interest in the matter to send any watchers or scientific gentlemen to report his progress from time to time, he hires his own attendants and they report his success from day to day. He began two weeks ago and looks no worse at present than when he began, strange as it may seem. His case reminds us forcibly of the doings of the colored men's poultry association whose motto was, "All business transacted after dark." All the important work was attended to after night.

The weather has moderated, the ice is disappearing, and it will be but a few days before plowing will be going on. Many plant their potatoes, seed to oats, get in their hardy garden seeds, and do much other early spring work in the month of February. It is time the implements were all put in the best repair, harness and teams got ready, and all other arrangements made for an early spring campaign.

Generally after so severe and long a spell of cold weather, in winter, we have an early spring. Farmers should be prepared to begin early so as to get in their crops early and well, and then give better cultivation than usual to get larger crops than ever before. Good work on the farm brings good pay, and bad work very poor pay, if any at all.

THE STATE UNIVERSITY.

We regret to see a few newspapers in the State making war upon Dr. S. S. Laws, President of the State University. We were a member of the State Board of Curators of the State University at the time his services were secured, and carefully investigated his qualifications and fitness for the office, and thought then, and still think, that it would be difficult to find his equal for the position in the United States. Men of his mental caliber are rare. It is very difficult to obtain the services of such. There are always plenty of positions for such men, and the University was very fortunate in securing a first-class President, and he has given character and standing to the institution. He has had every educational advantage afforded in this country and Europe, graduating in literary, medical, theological and law colleges. In addition he has rare administrative abilities, and has managed the institution with great tact and wisdom. It would not only be a great misfortune to the University but to the State to lose the services of such a man.

Missouri cannot afford to take a second-class man for President of her State University, and the chances are she could get no other if she lost Dr. Laws. He has been tried and not found wanting. He is ambitious to build up a great institution, that will be a credit to the State and an honor to him as President. He is surely doing this—doing it more effectively, we sincerely believe, than could any other man with the means at his command. Every friend of education should help to hold up his hands, and use his influence to aid in securing means to put the institution on a still better foundation by affording such needed improvements as are demanded at this time. Let the friends of the University, the true friends of education throughout the State, go to work as one man, not only to sustain the able and efficient President, but also to secure such needed appropriations from the State legislature as are actually demanded by the wants of the institution, so that it may be a credit to the State and a more efficient aid in the moral and intellectual development of the sons and daughters of Missouri.

The Missouri game law is to the following effect:
If any person shall purchase, have in his possession or sell, any of the game birds or animals or any fresh pieces or parts of said animals during the season when the catching and killing is prohibited, or shall purchase, have in his possession or sell, any of the game birds or animals caught or killed contrary to law, he shall be deemed guilty of a misdemeanor. The period on deer is Jan. 15th to Sept. 1st; wild turkey, Mar. 1st to September 15th; prairie chicken, Feb. 1st to Aug. 15th; quail, Feb. 1st to Oct. 15th. There are no restrictions on antelope.

It will be seen that several of these restrictions on the first of this and of next month and all who would keep within bounds of the law are expected to comply therewith.

KENTUCKY CORRESPONDENCE.

EDITOR RURAL WORLD: We are now passing through the coldest and most disagreeable part of our winter. All kinds of stock have done well so far, feed being plentiful and cheap with our usual supply of good water.

The demand for good Shorthorns did not terminate with the close of the public sales of last year, but steadily increased in a more substantial manner than ever before.

There have been several hundred bulls, young cows, and heifers shipped from this state within the past year to the great breeding and feeding grounds of the west. Our horsemen have done well and anticipate a good trade again on the opening of the season which will commence very soon now.

The great sales of trotters will open the latter part of this month. On the 20th at R. G. Stoner's farm near Paris, followed the next day by another on Thomas E. Moore's farm at Shawhan Station in the same county and another at Abdallah Park, Cynthiana, by W. H. Wilson on the 22d. These are all gentlemen of character and their stock not only warrants a good attendance but will justify good prices.

This is the great horse centre and the recognized breeding grounds of the country, there being within a radius of 20 miles of Lexington not less than 60 high bred trotting stallions in the stud. Our Kentucky farmers known as the beef producing class are a little disturbed over the high price of feeding cattle; those who held their fat stock late in the hope of getting big prices are now having to pay as much or more for their feeders which does not altogether agree with the outlook. Our wheat crop at present does not promise much, but 'tis early in the year yet and the end may scatter our fears to the winds and give us a good crop.

You shall hear from me again in a week or two. LEXINGTON.

Trumbull, Reynolds and Allen's Annual.

The firm of Trumbull, Reynolds and Allen located at Kansas City, Mo., send us their annual, in which is embraced a seed catalogue and price list, and also a list of the agricultural implements, carriages, buggies, etc., etc., manufactured and kept for sale by them. It may be had gratuitously by addressing them as above.

The growers of Northern sugar cane will find a full list of seeds with prices, such as Kansas Orange, Early Orange, Early Amber, etc., and as well a list of Mills, and Evaporators. These will be gratifying to the farmers of the West generally in that the reputation of this old and reliable firm is a guarantee of their purity. Of the Kansas Orange they say:

Some three years ago one of our leading sugar-makers called our attention to this variety as one that would surpass all others as far as his observation had gone, and his experience and that of others since, has confirmed all he at first said for it. It is ten days earlier than the Early Orange, stands up better than either Early Amber or Early Orange, as it has a short, thick stalk. Will produce twice as much seed and twice as much syrup, as the Early Amber. If not sowed too thick, will not fall at all, which makes it of greater value than any other variety. Will ripen in the North, while the Early Orange will not.

Another article that will be looked for with considerable interest and that many farmers will be anxious to get, is the Jerusalem Artichoke, well known of late years as a very valuable adjunct to the feeding of stock and particularly for those feeding or breeding swine in a prairie country, where mast is scarce but good and profitable everywhere.

Their potato list is a select one of choice and approved varieties. Sunflower seed for chickens, bees, horses is another specialty, together with Egyptian Rice corn, broom corn, white Russian oats, Craig's celebrated yellow seed corn, Chester county mammoth corn, Flax seed, castor beans, rye, wheat, clover, timothy, alfalfa, blue grass, red top, millet, etc., etc., and generally such seeds as are found useful and therefore called for by the western farmer.

With the list of seeds are found practical suggestions on the cultivation of the various crops, when planted, how harvested, their general utility, etc.

The work should be in the hands of every farmer.

It is a dangerous operation to cut off a cow's horns, especially to cut them off near her head. While the hemorrhage may not be such as to cause death, there are other dangerous results liable to happen from sawing off the horns at their base. The bony projections from the head, which form the support of the horns and reach far up into these, are hollow, that is, honey-combed, and these cavities connect with the cavities or sinuses of the forehead. Not only may serious catarrh of these sinuses result from this being exposed, but the blood escaping into the cavities, and closing them up, may by subsequent dissolution, cause a troublesome chronic inflammation and ulceration of the delicate lining membrane, as well as of the bony structure.

Coming Meetings.

February 1st, (Thursday)—Annual meeting of the Tennessee State Horticultural meeting, Humboldt.

February 3d—Cane Growers' Association of Western New York will meet at Somerset, Niagara Co. C. H. Spaulding of Hess Road Station, Secretary.

February 6th-9th—Annual Winter Convention, Wisconsin Agricultural Society, Madison. The Wisconsin State Horticultural Society will meet at the same time and place.

February 17th—Annual meeting of the New York State Sugar Cane Association, Geneva, N. Y. C. J. Reynolds, Secretary, Corning, New York.

February 13th-15th—Wisconsin State Cane Growers' Association, Madison.

February 14th—Seventeenth annual convention Northwest Dairywomen's Association, Mantoka, Minn.

February 21st—Mississippi Valley Horticultural Society's annual meeting, New Orleans. S. M. Tracy, Secretary, Columbia, Mo.

The Cattle Yard.

Interviews with Messrs. Wm. Parsons, W. L. Cassidy, Daniel Keys, W. J. Broderick and 'Squire Moore, Relative to the Hog Market Prospects, Etc.

The close of the packing season is always a time of speculation and conjecture with stockmen and farmers, as to values and prospects. With this in mind, the RURAL WORLD took occasion to learn the views of some of the leading operators at the National Stock Yards.

Mr. Wm. Parsons, a gentleman of large experience and comprehensive ideas, and who manages this department for the extensive and enterprising house of Hunter, Evans & Co., said: The outlook seems to favor a heavy supply of hogs during the spring and summer months, and it is but reasonable to look for lower values.

During the months of February and the first of March we may have a steady market, at about present prices, for the reason that it will be to the interest of the various packers to maintain hog values until they shall have disposed of the product now on hand, which may require a month or more of time. After the cattle and hogs begin to run freely, receipts will show a heavy increase, compared with last year's supply, and then nothing, except extravagant and improbable speculation, can prevent a decline in the value of live hogs and of hog product. But speculation (pork gambling) may under a certain degree of applied heat, that 180 minutes are requisite to raise the mercury 180 deg.; the heat remaining the same under the water, the thermometer will remain of the same temperature, until the water is all converted into steam; this time will cover 972 minutes. Thus over five times as much heat is absorbed from the animal system, in vaporizing a pound of water, as is required to warm it to the boiling point, and of course many more times than is required to warm it to blood heat. It takes but to do all this, and there is no escape from it. It is estimated, that it requires two and a half ounces of starch to vaporize a pound of water from the system, and to get two and a half ounces of available starch, would require the consumption of about five ounces of food; this is for only one pound of water. How many pounds in a long storm are there that have to be so disposed of? Again, in the open air there is always a current of air passing over the body of the animal, the more rapid the current, the more heat is carried off. That this may not seem to be passing too far into the uncertain regions of speculation, when words lose their force, I will quote a series of experiments that I made, that the public are familiar with, that show how sensitive the animal body is to external changes: I divided eight similar animals into four sets, two of which were carded and two remained uncarded for a considerable period. I found the uncarded steers gained slightly the most, while I lost my work. I then changed the carding, or reversed the treatment of the sets, with like results. The removal of a few hairs and perhaps a little dirt facilitated the radiation of heat. The second winter the trial was repeated with like results. Foreseeing the possibility that the increased radiation of heat might be attended with an increased consumption of food, the food in this second period was weighed to each animal. At the close of a period of from 1 to 2 months the carding was reversed. The entire result of months of weighing were all clearly one way. The carded steers ate 11-2 pounds more of hay daily in a barn than the uncarded, and when the carding was reversed the results in food consumption quickly followed. This shows how mercurial the system is to any change of external conditions. Storms or high winds make a tremendous tax on the system. But the animal in quiet, clear, cold weather requires an excess of food over warm days. Food is the fuel that keeps the system warm, and like a stove in cold days requires more fuel to keep the apartments warm. To give this fact definite expression in figures the temperature of the stalls of sheltered cows was taken and the milk flow carefully kept daily; the weight also of the cows was recorded and the amount of food eaten. In connection with these cows was fed a being fed in a cold stall. (The first set being fed in a cold stall). Before giving any results, it should be noted that they are comparisons between cows sheltered; the second lot having an average temperature just above the freezing point, while the first were in an average temperature of 45°. Time Jan. and February. From this statement it will be noted that much more unfavorable results should be expected from cows exposed to storms, winds and out-door air, where the temperature would run, perhaps, 15° or more below the freezing point. One of the first results noted was the constant dependence of the milk flow on the temperature. A long array, the results of hundreds of weighings, of figures would be required to illustrate the fact. I will merely state that there was a clear and undoubted connexion between temperature and milk flow; the variation in milk flow fluctuating with the thermometer according to the intensity of the change, between 1° and 10° less of milk. The cows in the open barn, or uncarded stalls, ate about 7 per cent. more and gave 2-8-10 per cent. less milk than those in the carded stalls. If we doubt these figures of loss for loss for the animal out of doors, and apply them to corn at 40 cts per bushel, hay 85 cts per ton, and milk at 21-2 cts per quart, 8 cts per day for 120 days we have a daily saving of 3-3-10c and \$3.96 for 120 days. I have assumed a consumption of 22 lbs hay and 8 lbs corn. Such a sum will more than pay the interest on a good barn that would house not only cattle, but food, when the manure saved will more than pay for the extra attendance, while the amount of food saved from trampling out and waste, and destruction and injury by rain would represent another advantage. The importance of this question has led me to attempt its investigation here, so far as the entirely inadequate equipment of the farm will allow. Results will be reported when ascertained, in the RURAL WORLD.

'Squire Moore, second member of the firm of Metcalf, Moore & Co., and a gentleman also of acknowledged prominence in the trade, said: The future is difficult to foresee, particularly in this market, as it is, perhaps, the most sensitive of all the lines of trade. There are many possible contingencies to help or to hurt it, but it strikes me about this way: There has been a stoppage of a great many large manufacturing establishments, and a good many laborers—meat-eaters—who are out of employment, and besides that, it is a fact that the country towns—outside points—have put up a considerable quantity of product, so that the order trade to great centres is likely to fall short. These considerations would seem to look like a lower range of values, but after all our immense immigration, will likely offset the idleness of operators, and as there has been no accumulation of product over the amount in sight at the same time last year; it does not, on the whole, seem probable that we will see any serious reduction or change until the next crop has become at least approximately conjecturable.

Mr. Daniel Keys, who has had a long and varied experience as a buyer, and whose opinion is especially valuable from that standpoint, said: The flood and damages to crops abroad are entitled to considerable weight. Receipts and stocks of products on hand show no great surplus for our consumption, and the foreign demand will add, of course, to the strength. I observe that the hogs this year come in better shape and quality than for years past. Judged by the condition of last year, we are often misled in guessing the weight from 10 to 20 pounds. A yorke looking like 180 pounds average as we then found them, now often weighs 200 pounds, and Ross, the packer, told me that he never had rough hogs to kill so well. My notion is that we will have strong prices throughout the season.

Mr. W. W. Jarvis, manager and leading capitalist of Little, Jarvis & Co., who with all his suavity and cheerfulness, carries a mighty level head, said: I am a believer in lower values. There is too much speculation and not enough legitimate trade. The prevailing high rates may be maintained till March, but things look squally—too many failures—the clearing house does not show a wholesome state of trade, values are based upon speculative and fictitious conditions. I say, look out for breakers.

Mr. W. L. Cassidy, whose talents are sufficiently varied to have made him a success as a sheep-man, hog-man, cattle-man and turf-man, and office-man, held this opinion: The stocks on hand are not likely to last to the end of the season, product has gone into consumption almost as fast as made, the demand continues good and the prospect, to my mind, is that values will hold up to the end, barring some unforeseen accident. But should we have as good a crop in 1883 as it is reasonable to hope for, I believe the packers will begin operations in the fall, at something like \$4.50 per hundred, live weight.

Mr. W. J. Broderick, of the house of Daly, Miller & Co., a prominent salesman and very capable writer as well, was interrogated as follows: What is your opinion in regard to the future prices of hogs and hog product? It seems to me very unlikely that present prices can be sustained for any great length of time. When values varied as slightly for the first three months of the packing season as they have this year. Prices are now very nearly the same as on the 1st of November and have fluctuated but little in the meantime. This, under the circumstances, is remarkable, as packers have had every opportunity to break the market on several occasions, but did not seem disposed to do so. For the past month one or two leading houses have tempted and acted bearish, and have attempted to break prices, but there appears to be as strong a party on the other side, who have held it up. The demand, either present or prospective, would not seem to justify the prices at which the stuff is held, and unless there is a strong decline between now and the first of May I shall be greatly disappointed. A year ago, with a short corn and hog crop, and in face of a certain great spring and summer shortage, prices were no higher than at present. This year, in addition to a heavy winter supply, there is no doubt but we will have a full average summer crop. It may be that packers having the first of March, but with the heavy stock of provisions on hand, take it is country all over, I think they will find

there is more of it than they can sell at present figures.

What do you think of the supply of hogs for next month?

"I look for liberal receipts of hogs all through to February and March. They will not, probably, be so heavy in weight, but there will be plenty of them."

How about the demand for the spring months in this market?

"We will have no trouble to sell all the hogs we receive here. The bulk will probably be shipped, as it is well understood that St. Louis gets better light and medium hogs in the spring and early summer than any market in the country, and eastern buyers prefer this market on that account."

Shelter for Stock.

ED. RURAL WORLD:—This Wednesday morning the ground is covered with a crust, after a rain last night. I find this State College farm in common with the practice of the country, houses its stock in the fence corners, and similar efficacious points of protection. Of course we hope for better things. In the meanwhile, I engage myself in querying whether shelter pays, from the cold blooded standpoint of the "Almighty dollar." Humanity often demands a hearing on such points, but her voice is not always so potent as the "jingle of the guinea." The rain and sleet of last night had to be, more or less of it, thrown off the system by evaporation. The process was going on continually through the storm, and then at its close the drenched body had to be dried. Few understand the amount of heat absorbed in evaporating water. In raising water from freezing, 32 deg. to the boiling point, 212 deg., it has been found that under a certain degree of applied heat that 180 minutes are requisite to raise the mercury 180 deg.; the heat remaining the same under the water, the thermometer will remain of the same temperature, until the water is all converted into steam; this time will cover 972 minutes. Thus over five times as much heat is absorbed from the animal system, in vaporizing a pound of water, as is required to warm it to the boiling point, and of course many more times than is required to warm it to blood heat. It takes but to do all this, and there is no escape from it. It is estimated, that it requires two and a half ounces of starch to vaporize a pound of water from the system, and to get two and a half ounces of available starch, would require the consumption of about five ounces of food; this is for only one pound of water. How many pounds in a long storm are there that have to be so disposed of? 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J. W. SANBORN.

Agricultural College, Columbia.

Shorthorns at Peabody.

We have real winter now, snow all over, thermometer eight degrees below zero, stock outside doing badly. We make great comfort for ours by housing about two hundred head, also comfort for those attending the stock and a large saving in feed. Good stock pays, and well, when properly cared for under shelter and given good feed in proper quantities.

My Shorthorns are doing splendidly, especially are the young things (ten but recently arrived) doing well, growing as if it were summer. My third crop of calves from the Rose of Sharon, Grand Aldrie bid fair to excel anything we have seen at Peabody.

Viscount Oxford 7th, the imported young bull which was purchased of Mr. R. A. Alexander last July, is doing well, and I think will do largely more than I expected. He is pleasing all Shorthorn men who see him. Greenies shake their heads and say "too much money."

Respectfully,
WILL R. KING.

Wants a Jersey.

COL. N. J. COLMAN:—What can a good Jersey or Alderney cow be bought for? I prefer one with second or third calf well broke and docile and that gives plenty of milk, in short, a good milker. I also want a good German farm hand. Can you get one for \$15 per month and board. Must know how to do all kinds of farm work. Must be sober and industrious, to such a one a good chance will be given on the farm. I don't want any but a reliable man, not too old.

W. C. FINDLEY.

Pemiscot Co., Mo.
REMARKS: See our advertising columns.

Smithfield Club Cattle Show.

The great show of the year recently closed, and the opinions of all the judges were that there had never been a finer one in England. The entries were large and the animals shown were very fine. The following are the principle prize winners:

CHAMPION PRIZES—CATTLE.
Best steer or ox \$50, silver cup; Lewis Lloyd, Kent, for Hereford steer.
Best heifer or cow \$50, silver cup; Richard Stratton, for Shorthorn heifer.
Best beast in the show Champion Plate of 100 gs; Richard Stratton on the above heifer.

ED. COLMAN'S RURAL WORLD:—Dear Sir:—Which, in your opinion, is the best, most profitable breed of cattle—the Short-horn, Durham or Hereford. Please give me the name and address of breeders of each. Those who are reliable, of course, and have thoroughbreds.

G. A. LEAVITT,
Texas County, Mo.

REMARKS.—We give the preference decidedly to the Short-horns, as frequently expressed in these pages. Reputable breeders may be found in our advertising columns.

Stock Items.

J. D. McCann & Co., of Monroe county, are feeding 112 head of cattle and 100 head of hogs in Vernon county.

R. P. Hopkins, of Saline township, Andrian, sold to J. D. Smith 26 two-year-old steers, averaging 1245 lbs., at \$45 per head.

J. D. Smith near Sturgeon has bought of R. P. Hopkins, 26 head of 2-year-old steers, averaging 1245 lbs., at \$55 per head.

A Chicago firm is preparing to erect a new elevator at Centralia. This will make the fifth institution of that kind for that growing town.

We have received the sale catalogue of H. D. Ayres' sale at Marshall, Mo., to come off on the 21st of February. Too late, however, for review in this issue.

Paris Appeal:—A prominent stock shipper of this county tells us that he has shipped \$20,000 worth of hogs this season and has not made \$50 on the whole lot.

At the monthly stock sales held last week at Liberty, in Clay county, calves sold from \$15 to \$23, yearlings at \$25; 2-year-olds at \$29 and aged steers at from \$25 to \$35.

David A. Gay, a well known breeder of Shorthorns, living near Winchester, Kentucky, recently lost two fine cows, says the Democrat, by the eating of dried fox-tail.

Among the companies incorporated at Jefferson City last week was the Columbia Cattle Company, of Boone county, Mo.; capital, \$125,000; 60 per cent. paid up. Incorporators: T. S. Moss, Shannon, C. Douglass, J. O. Hockway, Robert H. Hall, D. D. Moss and others of Boone county, Siseria Threlkeld, of Callaway, A. E. Douglass, of Cape Girardeau, A. C. Fisk, of St. Louis. Objects, feeding, raising and selling cattle and other live stock in Texas and establishing ranches in said state for that purpose.

William Pritchett of Peno Stock Farm, Frankford, Mo., writes us that, since his late sale he has added to his Shorthorn herd, six young Mary cows and heifers, all got by a Renick Rose of Sharon bull and bred to a Duke bull. He has plenty of good feed for all of his stock, hence they are doing well. He has yet for sale ten head of thoroughbred heifers and two year olds recorded or eligible to registry and bred to a first class young Mary bull which he will sell for sixty dollars a head.

The first annual meeting of the Kansas State Shorthorn Breeders' Association will be held in Topeka, Feb. 13th and 14th. All the indications point to a large and successful meeting. Gov. Glick will give an address, and numerous Shorthorn breeders have written their intention to be present. Among the speakers may be mentioned Gen. Stone, President of the Association, who will give an address; Col. Harris, of Lawrence, will explain the merits and advantages of the new herd-book; M. W. Waltham will read a history of Kansas Shorthorns; Hon. F. D. Coburn, of Wyandotte, will show what Shorthorns have done and may do at the Fat Stock Show. Other papers on practical topics have been promised.

The Horseman.

Com. N. W. Kittson's Trotters.

While at Minneapolis, we paid a visit to Com. Kittson's Midway Park, situated about half way between the cities of Minneapolis and St. Paul, about five miles from either city. We were met by Mr. D. W. Woodmansee, the traveling manager of this establishment, at the State University, who kindly took us in his cutter, and conveyed us to the stables. With a fine and fast horse, and plenty of robes, the trip was made comfortable even if the air was sharp. Mr. Woodmansee, is a very pleasant, intelligent gentleman, owns a fine home near the University, and a son and daughter are attending it, and will graduate in it. He thinks he can do nothing for his children, that will be of so much benefit, and for which in future years they will be so thankful, as to give them a thorough education.

Mr. Woodmansee attends to the entire outside management of the Park. He has purchased all the horses, planned the stable, which is fire proof, and erected at an expense of \$60,000. The farms, stable and horses composing this establishment, have cost Com. Kittson half a million dollars. There are ten horses now being prepared for races, including two pacers, whose average record is 2:19 1/4, and no other stable in the world can equal it in present performers.

Arriving at the stable, which resembles more a grand palace, we found it quite comfortable, being heated by large stoves. The arrangement is admirable, the horses being furnished with large box stalls, with wide passageways around them, affording the best ventilation.

Here we met Mr. John Splan, who has been selected as the Knight of the Ribbons to pilot the fleet ones to victory. It is doubtful if a more skillful driver is to be found in the United States. He has skill and courage and rare good judgment and knows how to manage to obtain a victory if he really wishes to secure it. The Ribbons are in competent hands, and the Midway Park will go to the front this year unless we are mistaken. Splan is a most entertaining talker and a horseman can stay with him for days, and to the last listen to his incidents and recitals from him that are interesting.

All the horses that are expected to be campaigned the coming season, are being jogged. As the snow is about two feet deep they are driven before cutters. Their shoes are all pulled off as the snow on their bare feet will not ball up as it will when shod. The horses are all in light flesh, in fact we thought rather too light. They are fed only six quarts of oats a day, or its equivalent, with what they pick up clean. In that cold climate horses are used to cover all that are to be trained. Mr. Ben D. Woodmansee is the Superintendent of the establishment, brother to the traveling Manager, and we were introduced to their father who was at the stables. He is from Ohio, and the family are horsemen, having been engaged in caring for horses since boyhood. Com. Kittson could not have obtained the services of more competent and reliable men.

The horses were brought out for our inspection, one at a time. There was the celebrated Blackwood, Jr., recently purchased from A. J. McKinnin of Nashville, Tenn., with a 5 year old record of 2:22 1/2, a stallion of fine style and great substance. He will do stud duty the present year.

Pilgrimage, b. s. 15 3-4 hands high, by the great Smuggler, record 2:15 1/4, dam May Morning, record 2:30 by Daniel Lambert.

Spottedwood, bl. s., by Blackwood, Jr., dam Norman by Norman, Jr., son of Alexander's Norman, with a five year old record of 2:22, and a record the present season of 2:19 1/2, by Sentinel, full brother of Volunteer, first dam May Short, by Bloods Blackhawk. This is a stallion of great promise. He is level headed, and it is hoped that he will wipe out the stallion record of Smuggler the present season. No stallion race will be made the present season that he does not take part in, and if he does not get to the front, his managers will be greatly disappointed.

Astoria, full sister to the great Dexter, 2:17 1/4, by Rysdyk's Hambletonian, dam by American Star, was shown us. She had a colt by her side by Von Arnim, that great expectations are built upon. The mare is a beautiful one.

Fanny Witherspoon, record 2:18 1/4, is a beautiful chestnut mare by Almont that is expected to trot fast. She looks as though an ordinary race would be too long for her. If she has a good luck her record will be considerably reduced the coming season.

Fleming Girl with a record 2:33, Lady Groesbeck with a record of 2:25 1/2, Lady Logan with a record of 2:30 1/2 were exhibited.

Then there was So-So by Geo. Wilkes, record 2:17 1/4, a bay mare 16 hands and high, foaled 1875, looks dangerous, and Lady Roled record 2:22 1/4 is a good one and is able to keep in the very best of company.

And here comes Little Brown Jug, the great pacer with a record of 2:11 1/4 with driving power enough we should think to cover a mile in 2 minutes. He is looking clean, and seems sound as a dollar, and will under Spinn's skill pace just fast enough to beat the best that start against him. And then here comes another fleet pacer, Gem, with a record of 2:20 that is expected to reduce her record many seconds the coming season. She is a beautiful bay mare and looks as though she could pace a race out.

Silverton, a trotter with a record of 2:20 1/4, by Blue Bull, is looking like a colt, and much is expected of him the coming summer. But were we to describe all the horses at this establishment we would fill columns.

The admirers of the horse will watch the achievements of this stable with great interest. We think the horses could not be in better hands.

"Condition" in Horses.

"Condition" has much to do with the question of ability to undergo severe labor in inclement weather without undue hazard, says the *National Live Stock Journal*. Condition is a state of the body not acquired in a day, as all experienced horsemen know. Without this, the trot-

ting or running horse is well understood to possess no hardiness, in other words, no power of endurance under hard pushing, at the same time a vital stamina that will enable the possessor to ward off disease, though hard-pressed and over-heated. An attempt, often made by the novice, to put a horse in condition for hard labor by suddenly increasing his feed, is inevitably followed by failure. Only a system of prudent, steady feeding, only vigorous exercise of the muscles being practiced at the same time, will insure success. If this be omitted, the animal will perspire freely with even moderate exertion. His heart will be found to run up in the frequency of its motions, thumping against the ribs more or less violently. This can easily be detected by placing the ear over the region of the heart, or, in fact, over any part of the chest in proximity to the heart. Suddenly feeding the horse up fixes a tendency to this. Steady muscular exertion builds against this tendency, and virtually removes it, if the practice be thoroughly and judiciously carried out. Do not mistake by supposing that these results will only follow fast work. A severe pull—even a single effort if severe—will cause a vigorous spasmodic effort to the heart as though the animal had been brought to his best speed under the lash.

Cracked Heels.

The peculiarity of the structure of the skin of the heels, its liability to be exposed to irritants of various kinds, especially from neglect of stable management, renders it remarkably susceptible to inflammation, and especially in this case in horses of a lymphatic temperament, where there is a disposition to swelling of the legs. Cracks in the heels of horses are liable to result from a variety of causes, and may be manifested in various forms, from a simple attack of scratches to that of grease-heal, canker of the frog, etc. The treatment, therefore, must be regulated according to circumstances. Grease-heal and canker will require special treatment, but a simple crack, from ulceration of the skin, unaccompanied with any offensive discharge, will, no doubt, readily yield to some simple treatment. If the heel is inflamed, it will be prudent to apply a linseed poultice for a few days, after which a lotion made of chloride of zinc 20 grains, water 8 oz., may be applied, daily, with a sponge. The patient should be kept out of the mud, and given moderate exercise only, until he recovers.

Swollen Legs.

The swelling of the hind legs, as described, is what is known as chronic local dropsy, which is due to effusion of serum into the cellular membrane. The means generally used in the treatment of such cases is hand rubbing, bandaging, regular exercise. In cases where there is evidence of general debility, it will be necessary to feed liberally, on a laxative, nutritious diet—oats, morning and noon, and carrots at night, with a hot bran mash occasionally, with a handful of linseed meal mixed in, constitutes an excellent diet. Some of the mineral and vegetable tonics administered, mixed in the feed, will materially aid in improving the health, and thereby restoring the tone of the weakened blood vessels.

Horse Notes.

The trotting stallion, Francis Alexander, record 2:19, well known to St. Louis horsemen, his speed having been developed here, will be put in training and trotted the coming season. He is by Burlington, he by George M. Patchen. His dam was by Canada Jack.

Jas. A. Pickens, of Ottawa, Ill., has sold to W. T. Bigbee, of Springfield, Mo., the pacer stallion Tyrone. He was foaled Aug. 31, 1873, by Scott's Hattoga, dam King Scott, by Scott's Hattoga, granddam by a son of Dan Rice's Arabian. Price, \$1,000.

Many horses that are placed upon the turf would find a more proper sphere in some butcher's cart, and the same thing is true *vice versa*. Horses, like men, are often found in an improper field of labor through force of circumstances. There is no doubt but many horses live and die in plodding work, which, if developed, would throw dust in the faces of many flyers, the names of which you see in nearly every paper you glance over.

If a trotting meeting could be had at St. Louis the coming spring it would bring a hundred horses to be trained. Com. Kittson's stable is anxious to come here, with Spinn as trainer. The nicely-graded, well-drained gravel roads at Forest Park are always in fine condition, winter and summer, for horses to be driven in. The climate is favorable for early conditioning horses. All that is needed is a track for trotting and the first meeting of the season to bring hundreds of horses here to be worked, leaving thousands of dollars in St. Louis every winter and spring. It is doubtful if any city has equal advantages for working trotting horses in winter; and it is extremely doubtful whether any city has fewer enterprising men, who take an interest in maintaining a track for the lovers of the trotting horse.

"The true test of prepotency in any trotting sire is not only his ability to sire with uniformity fast trotters himself, but that he shall possess the rare faculty of transmitting and intensifying the good qualities of his family uniformly for successive generations."

"The value of a stallion, as sire of trotters, is properly measured, not by production of one or two sensational trotters, but by the uniformity with which he produces trotters."

"The only safe rule in selecting stock for breeding purposes is not only to select from the very best families, but to rigidly limit the selections to the very best specimens of the very best families. This is indispensable to eminent success in breeding."—Gen. Withers.

A correspondent of the *Turf, Field and Farm* wanted to know "if there is any real ground for the opinion that a mare being bred twice to a jack is likely to throw an inferior horse colt. The mare is fourteen years old, and has dropped several colts by horses. The response was as follows: Some mares are more emotional than others, and those of this class probably feel for some years after the event the influence of a vivid first impression. We have seen colts by stallions, out of a mare which had been previously bred to a jack, which showed, especially about the head, some of the characteristics of the hybrid. The ears were long and coarse. We have seen other colts by stallions out of mares which had been fertile to a jack, which

bore no marks even suggestive of the hybrid. The dam of Glendale, for instance, dropped two mule colts, and her produce by trotting stallions are entirely free from the influence of the jack impression. Our observation leads us to conclude that a mare of sensitive or emotional organization may, if bred when young and for the first time to a jack, show for two or three years after that period a lingering impression of the hybrid. But a mare that has had colts by a stallion, and has arrived at the mature age of fourteen, can receive the embrace of a jack and after throwing a mule colt to him be bred back to a stallion and not produce an inferior foal.

Of insects, there are a number of species which infest domestic animals to a serious extent. The *bot fly* of the horse, (*Gastrophilus equi*), which produces the parasites known as "bots" is familiar to all. The bee-like adult fly deposits its yellow eggs upon the hair of the horse, particularly around the mouth, shoulders, and legs, where the horse is most likely to take them into his mouth and swallow them with his food. The young bots attach themselves to the walls of the stomach and if clustered near the pyloric orifice they may, as they become grown, cause serious obstruction to the passage of the food, while the irritation caused by their attachment to the walls is certainly no advantage to the animal. When full grown, which is in the following spring, they pass out through the alimentary canal, go into the chrysalis state in the ground, and issue as adult flies in midsummer.

The average harness in the rural districts is poorly cared for, and short lived. Not infrequently it is hung in the horse stable exposed to the ammonia, generated from a pile of fermenting manure. The stable may be furnished at odd spells with bedding or absorbents of some kind, but these are not promptly renewed, and there is great waste of the most valuable constituent of manure. The harness has the benefit of the ammonia, and the effect is about the same as washing it with lye. The harness rots, cracks, and without frequent oilings comes to grief at an early date. The safe way is to have a place for the harness in the carriage house, or some building outside the stable. If the stable alone is available, it should be kept free from the smell of ammonia by the constant use of absorbents, sawdust, soda, road dust, straw, or refuse hay. A harness properly cared for and kept clean and pliable will last twice as long as one that is neglected. It is much cheaper to spend ten cents for neat's foot oil, once in three months, than fifty cents at the harness makers.

Edwin Thorne is a nervous horse, but there is nothing vicious or bad about him. He labors under excitement when being harnessed for a race. The perspiration breaks from every pore. A horse must be nicely organized, or must be utterly tuned in order to trot or run fast. The will has a great deal to do with a supreme effort. No cruel bungler can drive a great trotter like Edwin Thorne or Maud S. It requires the delicate touch and skillful hand of a Turner or a Bair. The conqueror of Clingstone had four weeks' run at grass after his return to Thorndale in the Autumn, and now he is without blemish and as sound as the day he was foaled. He is driven from six to eight miles every day, is in good health and weighs 1,088 lbs. Mr. Thorne writes us: "My barns are well filled with good hay, my bins are full of oats and bran, my cellars are well stocked with sweet apples and carrots, and the horse is not for sale." The picture of Thorndale, sire of Edwin Thorne, which now hangs in our office, was taken from a painting of him by C. S. Humphrey, and it represents the horse in action, driven by Budd Doble. The picture of Lady Patriot, dam of Volunteer and Sentinel, is a faithful likeness of the grand old mare, because it was photographed from life by Schriber & Sons, of Philadelphia. The form and blood lines of such a producer should be carefully studied by both old and young breeders.—*Turf, Field and Farm*.

Beautiful Ever-blooming Roses.

All lovers of choice flowers should send to the Dingee & Conrad Co., West Grove, Pa., for some of their Lovely Roses. These roses are certain to bloom, and are the finest in the world. They are sent safely by mail, postpaid, to all post offices in the United States. This Company is perfectly reliable, and noted for liberal dealing. They give away in Premiums and Extras more Roses than most establishments grow. Send for their *New Guide* a complete treatise on the Rose, (70 pages, elegantly illustrated), free. See advertisement in this paper.

OUR IMPRUDENCE THE CAUSE OF CONSUMPTION.—How many of us can date the cause of our last sickness to either a crowded room, and then coming out in a cold air, or wearing damp clothes, causing a cough which settles upon the lungs, producing seated pains in the chest. Allen's Lung Balm will check the disease and restore health to the system, if only used in time.

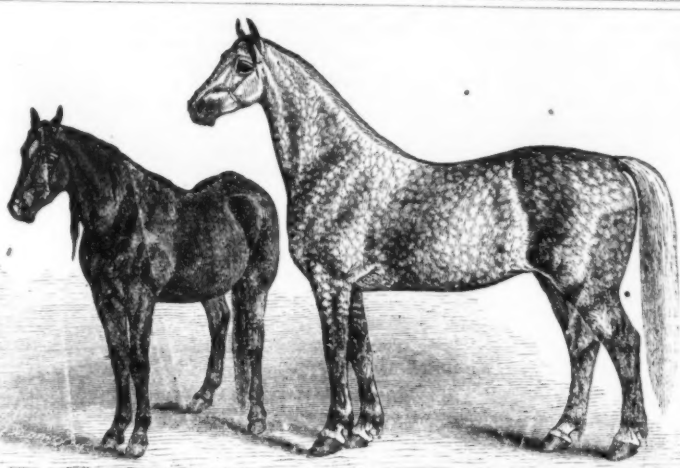
Pennsylvania farmers are anxious for the establishment of a State experimental station. Every state should possess such an institution. We can learn from the experiments of others, but each state has problems and conditions of its own to investigate.

"When the fountains of life are not corrupted and embittered by suffering; when the functions of womanhood are strictly normal, woman life is like music, with no discord to jar her delicate sensibilities and break the vital and organic harmony. But many who suffer from vital and functional disorders have found immediate relief and a permanent cure by using Mrs. Lydia E. Pinkham's Vegetable Compound.

Hard wheats contain more gluten, albumen and nitrogen than the soft varieties; they are, therefore more nutritious, and the abundance of nitrogen, which is in proportion of thirty per cent. in hard to five per cent. in soft varieties, promotes fermentation, which is deemed essential for good light bread.

"Better be wise by the misfortunes of others than by your own." Take warning in time. Avoid quack nostrums, by which thousands annually perish. Use only such remedies as are demonstrated above suspicion, foremost among which is Kidney-Wort. For torpid liver, bowels or kidneys, no other remedy equals it. It is sold in both dry and liquid form by all druggists.

Gold Rings, Solid 18 K., Rolled Gold, only \$1.00. Exquisite finish, unexcelled in quality; a most desirable and magnificent article, offered at one-quarter their value, by Messrs. Garfield & Co., New York. See their announcement in another column.



Pony Mare. Weight 750 lbs. Colt, weight 1,200 lbs., by imported Percheron Stallion "Success," weight 1,700 lbs. This colt is one of eleven got by imported Percheron sires from the same dam; the smallest colt weighing 1,100 lbs., and the largest 1,400 lbs., at maturity; which demonstrate the wonderful prepotency and value of the Percheron Stallions now so successfully used in crossing upon the small mares of this country.

BREEDERS' DIRECTORY.

LIVE STOCK AUCTIONEERS.

JAMES W. JUDY, Tallula, Menard county, Ills. live stock auctioneer, sales made in all parts of the country. Letters to any breeder in the west.

PHIL C. KIDD, Lexington, Ky., live stock auctioneer. Sales promptly attended to in all parts of the country. Correspondence solicited.

L. P. MUIR, Chicago, Ill., live stock auctioneer. Sales made in all parts of the United States or Canada. All correspondence promptly answered.

W. H. & THOS. C. EVANS, Sedalia, Mo., and Hogs, Bronze Turkeys, Plymouth Rock Chickens and Pekin Ducks.

R. W. GENTRY, Sedalia, Mo., breeds and deals in Thoroughbred Merino Sheep of largest size and best quality. Rams and ewes always for sale at prices as low as the lowest.

COL. JOHN SCOTT, Nevada, Iowa, live stock auctioneer. Sales made in all parts of the country at reasonable rates. Correspondence solicited.

T. C. LIPITT, Shenandoah, Iowa, breeder of and dealer in American Merino Sheep. Size, constitution and amount of cleaned wool a specialty. Stock rams for sale.

CHAS. F. MILLS, Springfield, Ill., importer and breeder of Clydesdale horses, Jersey cattle, Cotswold sheep and Berkshire swine. Purety of blood and reasonable prices guaranteed.

WILL R. KING, Peabody, Marshall, Saline Co., Mo., breeder of Short-horn cattle and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion All-mack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

H. D. AYRES, Marshall, Saline county, Mo., breeder of Short-horn cattle. Oxford Barrington 2nd 10369 S. H. R. at head of herd. Good stock for sale.

L. PALMER, Sturgeon, Boone County, Mo., breeder of Short-horn cattle. Stock for sale. Fifth Duke of Aachen (Rose of Sharon) and Commander (pure) Booth at head of herd.

H. V. P. BLOCK, Aberdeen, Pike county, Mo., breeds and has for sale pure and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion All-mack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

K. H. ALLEN, Breeder of Thoroughbred Short-horn cattle. Cotswold sheep, Berkshire hogs, Bronze turkeys and Light Brahma fowls. Allendale Stock Farm, 9 Fallon, St. Charles county, Mo.

SAMUEL JEWETT, Independence, Mo., importer and breeder of registered American Merino sheep. Satisfaction guaranteed to purchasers.

MERINO SHEEP.—H. V. Pugsley, Plattsmouth, Burlington county, Mo., breeder of registered Merino sheep. Prince, with record of 14 1/2, standard head of flock. Call or write.

R. C. FEW, Prairieville, Pike county, Mo., breeder of pure and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion All-mack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

D. W. MCQUITY, breeder of Short-horn cattle and importer and breeder of registered American Merino sheep, Rochester, Mo. Stock for sale.

CHAS. E. LEONARD, Bell Air, Cooper county, Mo., breeder of pure and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion All-mack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

P. A. ALEXANDER, Lone Jack, Mo., importer and breeder of Cotswold sheep. Satisfaction guaranteed. Call or write.

H. B. SCOTT, Sedalia, Mo., breeder of pure and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion All-mack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

R. T. McCULLY & BRO., Lees Summit, Mo., breeders and importers of Thoroughbred Merino sheep of the very best strains. Prices reasonable and satisfaction guaranteed.

FOR SALE.—Three Jersey bull calves. For pedigree, age and prices, address O. L. WALKER & SONS, Gray Creek Farm, Oregon, Mo.

J. BELL & SONS, Summerville, Texas county, Mo., breeders of pure Spanish Merino sheep and cattle. Catalogues will be ready by 1st of February. Terms, cash. Address me, COL. L. P. MUIR, Ayres, Marshall, Mo.

JOS. E. MILLER, Ellwood, Stock Farm, Belleville, Ill., breeder of Holstein cattle, shorthorn sheep and Yorkshire swine.

SHORT-HORN CATTLE. POLAND CHINA SWINE. Bred and for sale by J. H. ALLISON, Butler, Bates county, Mo.

G. W. Pleasant, Wright City, Mo., offers for sale choice fowls and eggs of L. Brahmas, P. Cochins, P. Rocks, W. Leghorns and Aylesbury Ducks. Established 1871.

D. R. B. BETTS, Louisiana, Pike county, Mo., breeder of Jersey cattle, Fifty-head Improved Chester White pigs. Stock for sale at reasonable prices. Ship from St. Louis.

BREKERS FOR SALE. I have on hand a choice lot of pigs, old enough to ship, and as good as can be found breeding. Stock at record. Address, O. L. J. BAKER SAPP, Ashland, Mo.

T. L. DAVIDSON, Grant City, Mo., Breeder of Fine Jacks, and have 12 on hand for sale.

RUSSELL & AKERS, (Successors to H. H. Russell) Warrensburg, Mo., breeder of Thoroughbred Poland China Swine. A portion of herd recorded in A. P. C. Record. Stock warranted as represented. Special rates by express. Correspondence solicited.

FOR SALE. A lot of unregistered Jerseys, consisting of young cows and heifers, handsomely marked, and well bred. The cows are big, rich milkers, for sale cheap. Address H. D. FRISBIE, Cynthiana, Ky.

NEARLY 1,000

Percheron-Norman Horses

Imported and Bred by M. W. DUNHAM, OAKLAWN FARM, Wayne, Du Page County, Illinois.

25 miles west of Chicago, on R. & N. W. R. Y.

468 OF THE FINEST

Imported from France by him during the past 12 months (250 since July 1st.)



Being more than the combined importations of all other importers of all kinds of Draft Horses from Europe for any previous year; and more than have ever been imported and bred by any other man or firm during their entire business career.

SPEND OFFER! Come and see for yourselves the greatest importing and breeding establishment in the world. Visitors always welcome, whether they desire to purchase or not. Carriage at Depot. Telephone at Wayne, with private Telephone connection with Oaklawn.

Dated Sept. 1, 1882. Send for Catalogue

PUBLIC SALE OF

SHORT-HORNS!

MARSHALL, MO., FEB. 21, 1883.

I will sell my entire herd of Short-horn cattle at the Fair Grounds, Marshall, Saline county, Mo., on Wednesday, 21st of February next. The herd consists of about 100 head—20 females and 27 bulls, Oxford Barrington 2nd (10369 S. H. R.) at the head.

The families represented in the herd are Wiley Duchesses, Crags, Brackets, Cambrias, Agathas, Dairymaids, Primroses, &c., &c.

The cows are sired by the 14th Duke of Thorndale 827, 3d Duke of Omedia 177, Duke of Woodland 928, 3d Lord Oxford 685, Oxford Brigand 909, Kirklevington Duke 2d 1012, 1st Cambridge Rose Duke 484, 2d Cambridge Rose Duke 485, Oxford Roan Duke 909, Duke of the Rose 827.

There will be no postponement of the sale on account of bad weather as all will be under shelter. Catalogues will be ready by 1st of February. Terms, cash. Address me, COL. L. P. MUIR, Ayres, Marshall, Mo.

SPEND OFFER! I will sell the above superb collection of 24 pigs, real prize \$1,200. Now, choice sows that will grow, and the Practical Farm House, a most useful and desirable for one year, all for \$1 a club of four \$3. This is the largest and cheapest offer of the kind ever made in this country for the money; the postage, order, or 10¢. Order on 12th St., N. Y. or send me a check for \$1.00. All who favor him with their orders will be promptly and fairly dealt with.—W. H. Briggs, Jr., Mo.

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The Home Circle.

ETIQUETTE.

She passes by my office door
Like a vision of rapturous beauty;
I drop my cigar on the floor
To gaze, as if 'twere my bounden duty.

By heaven! it doth stir my blood
When she goes by wreathed in smiles and
glory;
A queen is she of every mood,
Ever felt, or sung, or told in story.

Ah yes! she is queening it now
In grand style over those who are sighing
To kneel before her shrine and vow
Their unchanging love, their love undying.

O queen of every winning art,
As thou thus glidest past my office door,
What wonder if my pulsing heart
Should thrill with the memories dear of yore?

PAULUS.

THE SONG OF THE HEART.

Bilthely sings the young heart, and cheerily
shines the sun;
'Tis spring o' the year, 'tis early morn, and
life is but begun.

The day is bright, the heart is light,
And all the future years
Stretch forth as fair, with never a care,
Nor clouds, nor tears.

Boldly sings the young heart, but scorchingly
shines the sun;
'Tis the summer now, 'tis mid-day heat, the
work of life is begun.

But Hope runs high, while the steadfast
Fixed on the goal of fame, [eye,
Heeds not the glare, for he who will dare,
Must win a name.

Cheerily sings the old heart, while slowly sets
the sun;
'Tis autumn chill, 'tis eventide, and rest is now
begun.

Brave was the heart that did its part,
And ever upheld the right;
Now sets the sun, the work is done;
Now comes the night.

Hushed now is the tired heart, and set now is
the sun;
'Tis winter-time, the stars gleam out, the new
life is begun.

Calm is the sleep, and long and deep,
But bright will the waking be;
The Cross has been borne, the Crown will
Through all eternity. (be worn

That Bad Boy's Career.

Bon Ami has given us some "glimpses at a bad boy's career." On reading the piece through, one is at a loss to know whether the writer is trying to be funny, or is warning some poets to avoid the offense of writing rhyme and publishing the same under the name of poetry. Both would be laudable undertakings if properly accomplished; but the strained and prolonged effort of our writer to appear smart is too apparent in his lines, and a reader, though he admire B. A. very much, cannot help wishing that B. A. had substituted his poetry, "Harry and his Colt," for the last paragraph of his letter. Such substitution could not have rendered the letter worse than it is, however bad the verse may have been. Or, if Bon Ami had demonstrated the proposition, "the sum of the angles of a triangle are (a) equal to two right angles," for the Home Circle, this "incident" could not have been drier than the one he undertook to relate. After placing young "Harry" in a situation most ludicrous Bon Ami should have left him there, if he wanted to make anybody laugh. But instead he goes on and transfers the scene to the school-room and makes himself the central figure of it. He succeeds admirably well in making the school children laugh—on paper—but there is not the faintest suspicion of a smile anywhere else. After he leaves young Harry at the gate, etc., Bon Ami proceeds, in a pointed way, to give us the "glimpses at a bad boy's career," and he succeeds in—boring his readers. We hope he will not give us any more of these "glimpses" for the sake of his own reputation, and in consideration of his readers' feelings. But if he's determined to continue in this line we respectfully suggest that he transcribe a few, a very few, chapters from "A Bad Boy's Diary."

PAULUS.

A Rule of Grammar.

There is one in grammar (pardon the word) that even very good writers will persist in making. The rule violated is this: A pronoun should agree with its antecedent in number. This is, properly speaking, not a rule of grammar. In fact the English language is a grammarless tongue. What is a grammatical sentence? It is one that depends principally for its meaning upon the form of its words. A Latin sentence is grammatical, for its meaning depends mainly upon its verbal terminations. Words are arranged according to rule in the sentence of classical Latin. It is true, but the form of a word determines its meaning, whether the word is at the beginning, the middle or the end of the sentence.

The case is vastly different in English. Words almost always have the same form. The meaning of the English sentence is changed, not by changing the form of the words, but by changing the order of their arrangement.

I said that the rule in question is not, strictly speaking, a rule of grammar; but it is as near so as any rule in English. It is the form of the word that makes the error, but the form of the word cannot be changed. Thus we observe how little power grammar wields over the English language.

Let me quote a few examples in violation of the rule from one who is justly regarded as one of the very best writers of the Circle. Idyll, in her last article, says: "It is quite the thing not to know your next door neighbor, especially if they live according to their means." It is well known that women are capricious, but we certainly expect them to sit to a subject through a single sentence. It would be requiring too much to ask a woman to write two sentences on the same subject. Though we do not expect women to be logical, yet we may expect them to be grammatical.

Idyll has a fondness for leaving her subject. I shall quote one more example from the same article. She writes: "But one does not seek sociability at any

of these unless their apparel is the best and in the latest fashion."
The old English writers would perhaps substitute "a person" for "one," and "his" for "their;" but the best writers of our day prefer this construction: "But one does not seek sociability at any of these unless one's apparel is of the best and in the latest fashion."

A worse mistake is sometimes made by editors. Some of them write: "We feel a delicacy in referring to ourselves." This is certainly one of the prodigies of newspaper invention. It is a matter of surprise that any man who has sense enough to conduct a newspaper should make an attempt to introduce such an absurd word as "ourselves" into the English language.

I trust that what I have said will not be amiss. There are certainly more errors of this kind than of any other in the writings of the educated people. But if a solitary error destroys a writer's reputation, not even Irving, Hallam and Landor may be regarded as model English writers.

BON AMI.

Lloyd Guyot's Letter.

Under the above heading, in a late number of the WORLD, the writer observed an article of about half a column in length which he thought called for a few remarks. He (the writer) thinks that waste, be it ever so small, must inevitably end in want; and when such weak-minded individuals as Lloyd Guyot waste their own paper and ink, as well as those of the editor, and turn the intellectual stomachs of the readers (if I may be allowed the expression), he is moved to enter a protest—not against the editor (far be it!) but against Lloyd Guyot as personated in his writings.

In former years it was the writer's lot to take the Cincinnati Weekly Enquirer and the Journal of Agriculture. Both were good papers, but they had one fault in common: they allowed this trash of the Lloyd Guyot style to encroach upon the columns of miscellaneous news, until, thinking forbearance had ceased to be a virtue, I shortened my list of periodicals by two names. I have no fears of having to drop the WORLD on such an account, because I know that an ex-Governor of Missouri is brighter even than an Ohioan, and will keep this nonsense to its proper place; for as long as ink is cheap and the fool-killer neglects to do his duty, it will be written and the editor cannot well refuse to publish. I write this article, hoping that some of these Circle writers may be led to see their own imbecility, and may be prevailed upon to write sense or to hold their peace and be silent.

This Lloyd Guyot I first took to be a backward school-teacher (for I have yet to meet one who does not imagine himself a born rhetorician); but upon further reading, I discovered that he made his home in the city—presumably in some "Retreat" for weak-minded youth. For the benefit of those unfortunate subscribers who did not read the article, as well as for the edification of Lloyd himself, I will give a few quotations with my criticisms thereon, begging the reader to remember that the italics are my own. He says, "But the editor had too much 't' because he made the 't' too strong and then doubled it. Perhaps he wanted to balance the double 'l' with the double 't'; either that or some other intendingly humane, but innocently cruel, motive, so that out of the fruitfulness of my goodness I forgive him." To those of you who are acquainted with the rudiments of grammar, no remarks are necessary; and as to Lloyd Guyot, why, he is lost beyond the possibility of recalculation, in conceit so lost that he cannot be made to see that this should take the place of "that"; that his punctuation is worse than no punctuation at all; that his use of the word *fruitfulness* is unwarranted, not to say ridiculous; and that when all these corrections have been made, his sentence is still senseless, inelegant, and ungrammatical.

He speaks of our "oftime, faithful correspondents." Oftime, faithful! Will Lloyd Guyot please permit me to smile?

"While we have such fair writers as Ami, Nina," etc. The writer is not so fortunate as to have read the effusions of any of these writers; but, since Lloyd Guyot speaks of them as "fair writers," I have no doubt their articles would have filled me with delight, unspeakable, and yet, notwithstanding all this, I should much prefer the writers to their writings.

"Now, Whozzy, if I am not original, I risk the assertion that I am not totally ungrammatical." *Joe help us!* the conceit of this Lloyd Guyot is only equalled by his boundless ignorance of Grammar. This rhetorical prolixity proceeds to give us a few examples of "our correspondents" and succeeds in showing that he is better acquainted, yes, far better acquainted, with last year's language of the saloon and brothel than he is with his own mother tongue. Further on, he says, "—jest Bon Ami and myself again take to miscellaneous rhyming." Heaven forbid! "But man is born unto trouble as the sparks fly upward," and the readers of the WORLD cannot hope to be exempt. The writer would pray that this last bitter cup might pass from him, but since the death of Garfield, he has lost faith in prayer, and is now, indeed, without hope in the world.

As to the Editor's assisting on an article called "Kissing," he says, "Of course, surely Paulus does not mean to say that the Editor's knowledge begins and ends with Sorghum." As a young man, I give Lloyd credit for one paragraph worthy of publication, and I think the girls will second me, although I am convinced that among the old folks, this frank concession will work the ruin of my article.

Mr. Guyot next discourses learnedly on "literature," never using a monosyllable while a polysyllable can be found to fill the space; speaks of "our contents" as if there were a half dozen or more, and asks Ami her opinion, not of it, but "re-spect-ing it." He then moralizes on country life, saying, among other "gems," "it is quite natural to prefer the natural side of existence." Certainly, nothing plainer! We shall not argue this point with Lloyd, because it does not admit of argument; and even if it did, we do not care to disturb the dead calm of self-satisfaction that seems to pervade every portion of his conceited anatomy, entering, as it were, into his very "existence." "It is quite natural to

prefer the natural side of existence!" It brings to mind the congressional gentleman who commenced his address with the memorable words, "The generality of mankind in general," and the resulting admonition about "coming out at the same hole you go in at."

But I fear I weary the Editor, not to say Mr. Guyot; so, hoping that Lloyd has by this time reached the conclusion that he is better fitted for the wood-pile than to write for the press, I subscribe myself.

J. W. CHRISTOPHER COLUMBUS, No. 2.
P. S.—I cannot refrain from asking, as a personal favor from Mr. Guyot, that he do not take to rhyming.

THE WRITER.

Good Health.

HEADACHE.—Dr. Haley says that, as a rule, a dull, heavy headache, situated over the brows and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed, in about ten minutes, by a two grain dose of iodide of potassium dissolved in half a wineglassful of water, this being sipped so that the whole quantity may be consumed in about ten minutes.—*Glasgow Medical Journal.*

For a home-made disinfectant, dissolve a bushel of salt in a barrel of water, and with the salt water slack a barrel of lime, which should be wet enough to form a kind of paste. For the purpose of a disinfectant, this home-made chloride of lime is nearly as good as that purchased at the shops. Use it freely about sinks, cellars, gutters and outhouses, and in this way prevent sickness, suffering and expense.—*Christian Advocate, Buffalo.*

TO CURE A FELON.—Dr. T. C. Brannon in the *Therapeutic Gazette*, prescribes the following treatment for this painful malady:

Take of soft lye soap and flaxseed meal a sufficient quantity, stirring the meal in slowly with spatula or case knife, manipulating thoroughly, so as to form a salve or poultice. Enveloped in a good substitute for the flaxseed. Envelope the finger in this, applying snugly, and occasionally pressing it to bring it in closer contact. Renew the poultice every twelve to twenty-four hours. Don't try every prescription you may hear of. Depend on this. It will, if applied in time, abort the disease; if adopted later, it will bring it to a small "head" (if too far advanced to be scattered), when it may be picked almost painlessly.

A Cure for Diphtheria.

An English physician recently prescribed a teaspoonful of sulphur in a wineglass of water to be used as a gargle. A correspondent applied this dose of sulphur on a flat stick to his own children, who were desperately sick with immediate relief, and now the editor of the *Philadelphia Record* says:

"A gentleman residing in the northern part of the city, whose two little daughters were dying last Thursday of diphtheria, saw in the *Record* of that day a communication commending the use of sulphur in cases of diphtheria. As a last resort he made a trial of it, using washed flour of sulphur, and applying it directly to the membranes of the throat. In the throats of the children by means of a common clay pipe. The effect was almost magical. Within two days the children, who had been given up by their physician, had recovered."

It is stated that diphtheria is caused by animalcules just below the roots of the tongue, and the theory of the application of sulphur is that it destroys them. It is a remedy easily tried, and need not interfere with the treatment of any physician.—*Chicago Tribune.*

Remedies for Emergencies.

Very few young mothers are able to control their nerves so completely as to keep from being startled, when confronted with a cut finger with dripping blood and the loud cries that announce a catastrophe. Sometimes she cannot collect her thoughts sufficiently to recall any of the good remedies with which she is familiar. One way to avoid this is to write out a list of help in trouble, and tack it upon the door of your room, after the manner of hotel regulations.

There is nothing better for a cut than powdered resin. Get a few cents worth, pound it until it is quite fine, and then put it in a small glass jar or bottle, with a stopper. When you need it, dip your finger with dripping blood and the loud cries that announce a catastrophe. Sometimes she cannot collect her thoughts sufficiently to recall any of the good remedies with which she is familiar. One way to avoid this is to write out a list of help in trouble, and tack it upon the door of your room, after the manner of hotel regulations.

It is always well to have some simple remedies in the house, where you can get them without a moment's loss of time; a little bottle of peppermint, in case of colic; chlorate of potash for sore throat; pepsin for indigestion, and a bottle of pure brandy. Have them so arranged that you could go to them in the dark, and reach the right one, but be sure you never do it, even if you know they have not been disturbed; always light a lamp, or the gas, and make sure you have what you want. Remember that pistols are always loaded, and that poison may be put in the place of peppermint.

DON'T DIE IN THE HOUSE.—Rough on Rats. Clears out rats, mice, roaches, bed-bugs, flies, ants, moles, chipmunks, gophers, etc.

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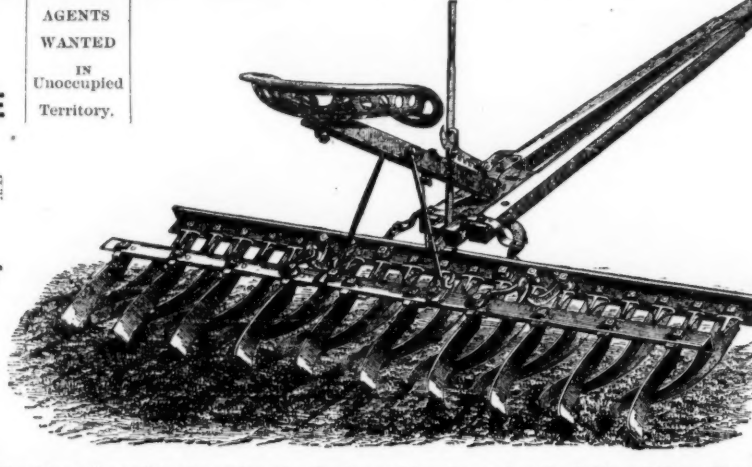
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The Stock Pards.

Weekly Review of the Live Stock Market.

WEDNESDAY, JANUARY 24, 1883—2 p. m. Receipts 24 hours—1,750 cattle; 3,410 hogs; 840 sheep.

CATTLE—Receipts were liberal, and market was active and strong on all grades. Pens were well cleared at noon. Representative sales:

No.	Description.	Av.	Price.
21	native cows	1004	\$3.90
15	native cows	941	3.65
15	mixed butchers	921	3.45
15	native butchers	920	3.40
16	mixed butchers	922	3.42
16	native butchers	921	3.40
17	native steers	1218	5.00
15	southwest steers	1218	5.00
17	native steers	1218	5.00
15	native steers	1218	5.00
51	native steers	1149	4.85
20	native steers	1232	5.00
13	native steers	1027	4.50
17	native steers	1245	5.10
64	native steers	1319	5.25
36	Colorado steers	1373	5.40

HOGS—Market for choice heavy hogs open, active and about as strong. Choice butchers and selected heavy sold at \$6.50 to \$6.65. Good to choice heavy (Boston hogs) sold at \$6.40 to \$6.55. Packing hogs were a shade easier and ruled weak to the close—common to good sold at \$6.20 to \$6.35. Light hogs were 5c stronger—Good Yorkers of 200 to 225 lb average sold at \$6.20 to \$6.25, bulk at \$6.20, a few light weights and common sold at \$6.10 to \$6.15. Representative sales:

No.	Description.	Av.	Price.
27	341	6.65	41.211
24	292	6.30	24.212
10	210	6.25	20.213
54	197	6.20	51.306
11	279	6.20	11.279

SHEEP—Market was active and stronger. All sold. Sales:

No.	Description.	Av.	Price.
12	104	5.00	169
78	81	3.50	88
79	78	3.00	308

THURSDAY, JANUARY 25, 1883—2 p. m. Receipts 24 hours—2000 cattle; 4000 hogs; 3300 sheep.

CATTLE—Receipts were liberal, and market was fairly active and firm early in the day on all good cattle but later in the day some sales of common and coarse cattle were about 10c lower, and nearly all others were shaded a little. Pens were about cleared at the close. Representative sales:

No.	Description.	Av.	Price.
35	native cows	1074	\$4.00
10	native butchers	961	4.00
19	native steers	1062	4.45
18	native steers	1073	4.75
18	southwest steers	1073	4.75
19	native steers	1118	4.70
17	native steers	1258	5.20
17	mixed butchers	1258	5.20
17	native steers	1364	5.30
17	native steers	1354	5.30
20	native steers	1118	4.70
42	native steers	1117	4.70
16	native steers	1065	4.65

HOGS—Market for choice heavy hogs was quiet and a shade easier. We now quote choice butchers and selected heavy at \$6.45 to \$6.60. Good to choice heavy (Boston hogs) at \$6.25 to \$6.50. Packing hogs were 5c lower, and sold at \$6.15 to \$6.30. Light hogs were active a shade stronger, good Yorkers of 200 to 225 lb average sold at \$6.20 to \$6.30, bulk at \$6.20, a few light weights and common sold at \$6.10 to \$6.15. All sold. Representative sales:

No.	Description.	Av.	Price.
24	106	6.15	41.211
10	210	6.25	20.213
54	197	6.20	51.306
11	279	6.20	11.279

SHEEP—Market was fairly active and firm under liberal receipts. Sales:

No.	Description.	Av.	Price.
24	106	6.15	41.211
10	210	6.25	20.213
54	197	6.20	51.306
11	279	6.20	11.279

FRIDAY, JANUARY 26, 1883—2 p. m. Receipts 24 hours—1500 cattle; 3500 hogs; 1500 sheep.

CATTLE—Heavy shipping steers are slow and from 10c to 15c lower than yesterday. Medium weight steers are about 10c lower and slow, but light shipping steers are fairly active and only a shade lower. Cows, uneven cattle are irregular and dull. Butchers cattle ruled fairly active and steady. There is a good inquiry for fresh milch cows. Representative sales:

No.	Description.	Av.	Price.
13	mixed butchers	973	\$4.00
16	native butchers	973	4.00
12	native cows	838	3.75
10	southwest steers	940	4.00
27	native butchers	973	4.00
18	native steers	1131	4.80
17	native steers	994	4.60
17	native steers	1258	5.20
14	native steers	973	4.00
27	native steers	1276	5.05
32	native steers	1179	4.90
31	native steers	1229	4.90
24	native steers	1076	4.70
18	native steers	1177	4.75
20	native steers	1186	4.75

HOGS—Market was fairly active for heavy hogs, choice and selected lots selling at \$6.40 to \$6.50, and good to choice heavy at \$6.20 to \$6.40. Packing hogs generally sold at \$6.20 to \$6.35, though extreme range reached from \$6.00 to \$6.50 for very coarse, to \$6.35 for choice. Light hogs were active at \$6.20 to \$6.25 for fair to good, though a few light weights and common sold at \$6.10 to \$6.15. Indian hogs sold at \$5.25 to \$5.75. All sold. Representative sales:

No.	Description.	Av.	Price.
22	236	6.25	27.287
24	185	6.25	72.206
26	246	6.25	20.213
28	242	6.25	20.213
61	300	6.25	19.210

SHEEP—Market dull, about 20c lower. Sales:

No.	Description.	Av.	Price.
52	31	4.40	11.279
31	85	4.40	31.85

MONDAY, JANUARY 29, 1883—2 p. m. Receipts 24 hours—1600 cattle; 3500 hogs; 2000 sheep.

CATTLE—Heavy shipping steers are dull and from 10c to 15c lower than Friday, or 25c to 35c lower than Wednesday and Thursday of last week. Receipts here are liberal and but a few are selling. Chicago and the Eastern markets are glutted. Light weight steers are not so much depressed as the heavy cattle, but they are slow and lower. Butcher cattle are about 10c lower than Friday and slow. Representative sales:

No.	Description.	Av.	Price.
12	native steers	1121	\$4.12
32	native steers	1389	5.20
17	native steers	1506	5.37
37	native steers	1332	5.37
25	mixed butchers	974	3.80
20	southwest steers	992	4.37
16	native steers	1174	4.80
13	southwest steers	920	4.10
15	native steers	1073	4.75
22	native butchers	973	4.00
12	southwest mixed	792	3.50
16	native cows	967	4.50
20	native butchers	948	4.20
15	native cows	886	3.75
20	southwest steers	981	4.40
20	southwest mixed	864	3.50
20	native butchers	980	4.35
21	native butchers	980	4.30

HOGS—Market to-day was fairly active for heavy hogs. Quote choice and selected lots at \$6.40 to \$6.50, and good to choice heavy at \$6.20 to \$6.40. Packing hogs generally sold at \$6.20 to \$6.35, though extreme range reached from \$6.00 for very coarse, to \$6.35 for choice. Light hogs were 5c to 10c lower, selling at \$6.10 to \$6.20—bulk \$6.10 to \$6.15. All sold. Market closed quiet. Representative sales:

No.	Description.	Av.	Price.
19	272	6.25	40.275
50	285	6.25	31.301
50	194	6.25	20.108
47	206	6.10	21.199
20	222	6.10	21.222
18	196	6.10	21.206
18	196	6.10	21.206
18	225	6.25	21.206
52	279	6.15	11.332

SHEEP—Pens are full, and market is dull and about 25c lower than last week. Sales:

No.	Description.	Av.	Price.
19	272	6.25	40.275
50	285	6.25	31.301
50	194	6.25	20.108
47	206	6.10	21.199
20	222	6.10	21.222
18	196	6.10	21.206
18	196	6.10	21.206
18	225	6.25	21.206
52	279	6.15	11.332

THURSDAY, JANUARY 30, 1883. Receipts for 24 hours. Cattle 1574; hogs 2180; sheep 257.

CATTLE—This day's business was a continuance of the Monday trade. Values were in no wise altered, being 20c to 30c lower than Thursday of last week on shipping steers and 10c to 20c for lighter cattle. But the tone seemed to be slightly improved—there was a little better disposition to buy butcher stock and shippers both. Representative sales:

No.	Description.	Av.	Price.
17	native steers	1311	\$4.75
18	native steers	1351	5.05
17	native steers	1010	4.55
16	native butchers	942	4.35
36	native steers	1253	5.00
18	native steers	1227	4.85
51	native steers	1158	4.85
50	native steers	1284	5.50
24	native feeders	1177	5.15

HOGS—The range of prices was not notably changed, but there was an appreciably better feeling on all grades. We quote light shipping \$6.10 to \$6.20; packing \$6.00 to \$6.15 for mixed, and \$6.15 to \$6.30 for good packing; good to choice heavy \$6.35 to \$6.50. Tone satisfactory. All sold. Representative sales:

No.	Description.	Av.	Price.
20	313	6.20	24.212
26	287	6.25	28.269
32	297	6.35	30.293
22	200	6.25	22.281
18	180	6.15	21.298
19	180	6.10	21.298
19	180	6.10	21.298
20	204	6.20	26.243
26	272	6.30	26.278
36	276	6.30	26.278

SHEEP—Good sheep readily sold, but all shaded from last week. Common kinds off worst; some sell, mostly shipped out. Representative sales:

No.	Description.	Av.	Price.
10	common sheep	73	\$3.25
10	common sheep	73	3.25
117	sculwags	890	4.40
85	native sheep	98	4.75
49	native sheep	111	4.65
80	native sheep	98	4.50

GENERAL MARKET. FLOUR—Dull and easy. We quote X \$2.75, XX \$3.75; XXX \$4.40; family, \$5.00; choice \$4.80.

WHEAT—Grades were various in course of the market value, but were in demand and in better movement than recently. No. 2 red winter sold at a decline, though closing on the forenoon board with a firmer feeling, but No. 3 red sold firm at an advance and No. 4 winter at unchanged price. On the forenoon board futures were higher and strong at top rates at the close, though weak and lower at the opening from the unsettled and vacillating Chicago market. No. 2 selling, cash \$1.02 1/2, No. 3 cash 94c, No. 4 cash 91c.

CORN—Had a lower but active market cash and futures, and closed at the lowest price of the day. There was an active demand for No. 2 mixed for export and speculative account, and new mixed had free sales at 46c to 47c—the latter regular and sought by all classes of buyers. No. 2 white mixed was in demand, but offerings have been held back and no sales have been reported since last Wednesday, yet bids have had a declining tendency.

OATS—Grades had a healthier market every day, the demand being quite active and diversified, and movement liberal in amount. No. 2 in free offering—opened out a fraction off, but soon reacted under strong competitive bidding between order and speculative buyers, closing firmer.

PROVISIONS—Bacon slow and easy, at say 10c for clear, 10c to 10c for clear rib, 9c for clear and 8c for shoulders, boxed. B. S. Meats generally firmer, but very dull at all hands. Pork neglected—held in S. H. bids at \$17 for ham and \$17.25 for standard, but no buyers. Lard nominally stable at 10c to 10c. Sales: Pork—On orders, 25 lbs at \$18.

BUTTER—Receipts heavy and offerings very large; market demoralized, dead dull and lower, save on fancy large-baled timothy. Sales very few and what were made went at fully 5c to 10c per ton decline. Sales: East trk 4 cars prime timothy at \$11.50 to \$12, 1 prime mixed \$10, 2 fancy large-baled at \$15; this side—2 cars prime prairie at \$8, 4 choice do at \$8.50, 2 overripe mixed at \$9, 2 cars prime mixed at \$10 to \$10.25, 1 low do at \$6.50, 1 prime timothy at \$11.50, 6 strictly prime at \$11.50, 5 (latter small-baled) at \$15, 2 choice at \$14 to \$15, 2 fancy at \$15 to \$16.

BEETROOTS—Trade extremely light and price weak; stocks large of medium grade packed, supply equal to demand. We quote: Creamery mainly at 35c to 38c; dairy—choice 20c to 32c; medium 17c for common to 20c for good, low 12c to 15c; roll—country at 14c to 16c in lots and at 20c to 22c for choice do well handled; dairy at 20c to 22c to 25c.

CHEESE—In fair request and steady. Full cream at 12c to 14c, prime part skin 7c to 8c; inferior at 3c for low to 6c for fair.

EGGS—Steady, but demand light and on local account only at 25c for fresh; 50 cases (very bad) sold at 10c per doz.

DRESSED POULTRY—Little offering—Inquiry light. Geese very dull and lower; considerable held-over stock for sale: small sales of choice chickens. Ducks and turkeys—rough stock neglected. We quote: Turkey at 15c per lb for choice, 14c for rough; chickens—small \$2.50 to 3.00, fair to good \$2.50 to 3.00; ducks—medium \$2.50 to 3.00, fair to good \$2.50 to 3.00; choice \$2.50 to 3.00; geese—thin and rough \$2.00 to 2.50, fair to good \$2.50 to 3.00; pheasant \$6; quail at \$1.25; rabbit 75c for Kansas, 50c for Missouri and Illinois; squirrel 50c to 60c; ducks—mallard at \$2.50, teal at \$2, common mixed \$1.50; wild turkeys 10c per lb; jack rabbit \$2.50 to 3.00; possum 10c to 20c each.

POTATOES—Car-load lots quiet and weak, at 75c for inferior to \$2.00 for choice—damaged at 55c to 70c; only four cars reported sold. Trade mainly in near-by growth, which sold chiefly at 50c loose from farmers' wagons.

ONIONS—Quiet but steady at 65c to 70c for yellow and 75c to 80c for red. Sale Low yellow at 75c.

CABBAGE—In fair request. We quote at \$8.00 per 100 loose, and \$2.25 per crate packed, on orders.

SAUER KRAUT—Quiet. Quote: Bbls \$3.25 to \$4.00, half-bbls \$2.25 to \$3.00; orders charged higher. Sale 65 half-bbls at \$2.40 each.

WHITE BEANS—Firm. Navy in fair demand for seed; others selling from store only; country at \$1.75 to \$2.00; Eastern jobbing only at \$1.50 to \$1.75; do navy \$2.00, hand-picked medium \$2.50 to \$3.00, do navy \$2.00 to \$2.50.

APPLES—Choice fruit scarce and firm in price; Ben Davis at \$3.50 to \$3.75, winesap \$2.50 to \$3.00, \$2.50 to \$3.00; all soft, specked damaged, inferior or poorly packed stock slow of sale at considerably lower figures.

HEMP SEED—Nominally firm at \$1.30 for prime. None offering.

CASTOR BEANS—Scarce. Prime steady at \$1.37 1/2, No. 1 \$1.25 and inferior \$1.25 to \$1.30.

COTTON SEED AND MEAL—Seed quotes at \$13.50 on the levee. Meal \$20 per ton in car-loads.

SALT—Lake nominal at \$1.15 to \$1.20 per bbl.

BROOM CORN—Selling fairly, crooked 2 1/2c to 3c, fair 3 1/2c, prime 4 1/2c to 5c, strictly prime 5 1/2c to 6c, choice long green 6 1/2c to 7c.

HONEY—Dull and weak; comb at 14c to 16c; strained 6 1/2c to 7c; extracted 10c to 12c.

DRIED FRUIT—Firm. In demand with free sales (about 800 pkgs reported) at following figures: Apples at 7 1/2c to 7c; peaches at 6 1/2c to 6c; inferior less; sliced apples quotable at 8c to 8 1/2c, do evaporated at 10c to 11c.

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18	196	6.10	21.206
18	196	6.10	21.206
18	225	6.25	21.206
52	279	6.15	11.332

Groceries.

COFFEE—Rio common 8c; do good common 8 1/2c; do fair to good 9 1/2c; do prime to choice 10 1/2c; do strictly choice to fancy golden 12 1/2c; Costa Rica 15c; Laguayra 10 1/2c; Santos (light golden) 11c; Mexican 11 1/2c; Guatemala coffee 15c; old government Java 25c to 27c; Singapore Java 20c to 22c.

REFINED SUGARS—Belcher's granulated standard 9 1/2c; powdered 9 1/2c; fine powdered 9 1/2c; coffee sugar—standard A 9 1/2c; Missouri A 9c; extra C 8 1/2c; standard C 8 1/2c; yellow C 8 1/2c; refined yellow sugar sold at relative prices.

NEW ORLEANS SUGAR—We quote: Common Blue 6 1/2c; fair 7 1/2c; strictly prime 7 1/2c to 7 3/4c; strictly choice 7 1/2c; clarified sugar, white 8 1/2c; do yellow 8 1/2c. Yellow, refined—Fair 7 1/2c; prime 7 1/2c; choice 7 1/2c; fancy 8c.

MOLASSES AND SYRUPS—LOUISIANA—We quote: choice 60c; prime 57c; fair 55c; sorghum—choice 45c; do gallon 45c do prime do 46c to 48c. RICE—Choice, California 8 1/2c to 9c; choice Louisiana 6 1/2c; prime 6c; Rangoon 5 1/2c.